

Your Complete Guide to Enterprise Content Management

Your essential resource for researching and exploring Enterprise Content Management



What to Expect from This Guide

This guide is designed to provide a detailed and comprehensive overview of all aspects of enterprise content management. It covers a range of topics, including document management, information governance, workflow management, and collaboration tools.

Whether you're a small business owner or a large corporation, this guide will serve as an ideal launching point for researching potential solutions and identifying your organization's unique needs. You will learn about the various types of content management systems available, as well as the benefits and drawbacks of each.

Additionally, this guide will provide insights into best practices for implementing a content management system, including tips on ensuring user adoption and effective change management. By the end of this guide, you will have a solid understanding of enterprise content management and be better equipped to make informed decisions for your organization.



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What is Enterprise Content Management?

Data and information are the lifeblood of countless business processes, but as organizations scale, this information can become difficult to manage, leading to bottlenecks, security concerns, collaboration issues, and other costly inefficiencies.

Enterprise Content Management (ECM) refers to the solutions used by organizations to capture, manage, store, and deliver information in a structured and organized manner. ECM aims to facilitate the creation, collaboration, distribution, and retrieval of information across your organization, ensuring that the right individuals have access to the right information at the right time.

Differences Between ECM and Document Management

ECM and document management are closely linked. After all, much of the information organizations manage on a daily basis is contained in documents. But while document management solutions only assist with the challenges of document images, enterprise content management helps manage content of various types and leverages the information within this content and your document images to create further efficiencies and automation opportunities.

Why Invest in Your ECM Strategy?

With the adoption of automation tools and solutions on the rise, many companies are making ECM a part of their broader strategies to help with the following:



Compliance



Productivity



Risk



Collaboration



Cost Reduction



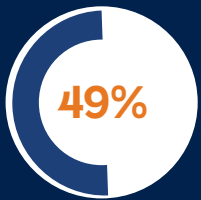
Customer Service

With growing economic pressures and a far more competitive labor market, many organizations continue doubling their investments in intelligent information management solutions like enterprise content management. This trend can be summed up with the following statistics from AIIM:



14.42%

The number of organizations using 7-10 information management systems has risen from 3.6% in 2013 to 6.2% in 2018, and 14.42% in 2023¹



49% of organizations have achieved basic automation with an additional 33% using integrated systems¹



14.88%

Senior Executives



54.16%

Mid-Level Executives

14.88% of information management professionals held senior executive roles, and 54.16% held mid-level executive roles¹

Source:

1. info.aiim.org/2024-state-of-the-intelligent-information-management-industry



Benefits of Enterprise Content Management

Effective document management offers organizations a slew of benefits, including:

✓ Increased Security and Compliance

With regular audits that call for documents and personal information that must be safeguarded, organizations frequently implement enterprise content management solutions to automate document retention, provide convenient access to records during audits, and restrict access to protected information to only those trained and authorized to handle it.

✓ Reduced Costs and Increased Productivity

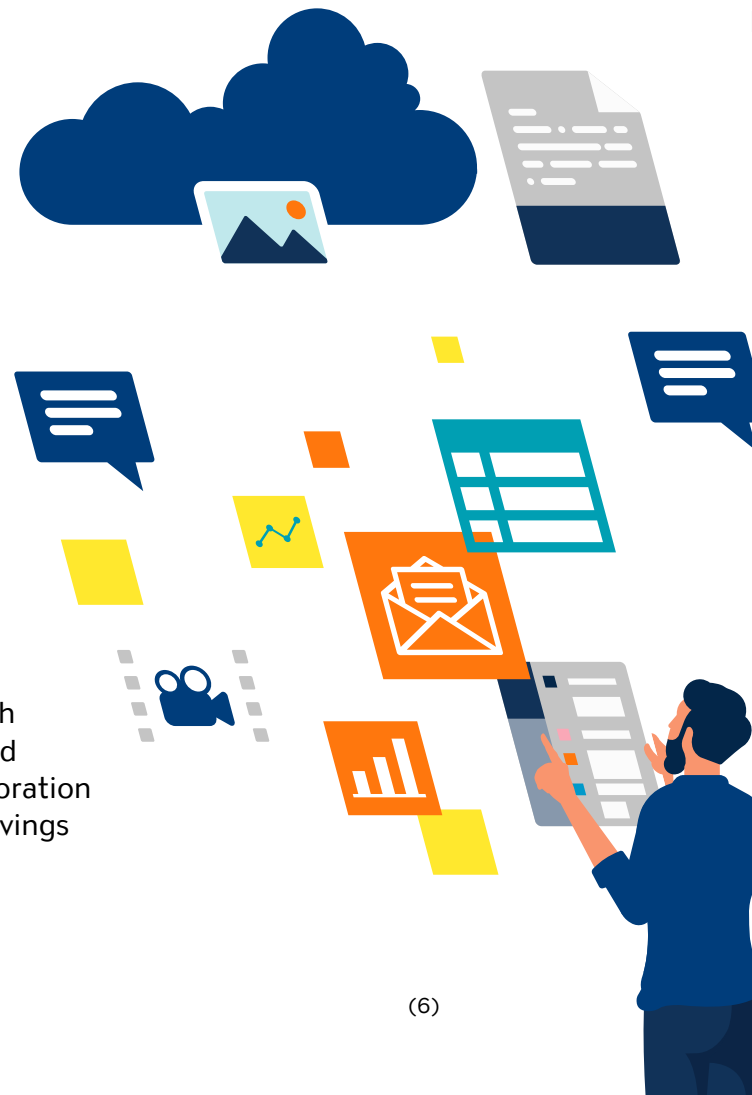
The costs of paper, ink, toner, on and off-site storage, printer rental, and maintenance add up to an absorbent amount that could be sidestepped entirely. Combined with productivity increases that save paid hours on document retrieval, collaboration efforts, data entry, and more, the savings become even more apparent.

✓ Improved Collaboration

The presence of multiple file versions can often be confusing, and disjointed processes for passing off documents to approvers and other collaborators can lead to severe bottlenecks. Automated document routing, version control, and tools for approvals, redactions, and other collaboration efforts ensure your organization can work collectively and efficiently.

✓ Enhanced Customer Service

When information is time-consuming to retrieve, customers are often left waiting for answers. By providing readily available access to countless records, your team can be ready to field any questions that come their way. ECM solutions with public portal functionality take this a step further by facilitating self-service access to information for customers.



Finding The Right ECM Solution

With so many diverse options on the market and an enormous amount of information to parse through, finding an enterprise content management solution that meets your organization's needs can be challenging.

Types of ECM Solutions



On-Premise - With an on-premise solution, your organization owns the software, which also means bearing additional responsibilities and costs. This often means paying for the price of the software upfront, as well as any hardware and maintenance costs for the on-premise server. An experienced technician will also be required to keep the system running smoothly.



Cloud-Based - With a cloud-hosted solution, the responsibilities and costs of server maintenance are shifted to the provider for a monthly or quarterly cost. Adding additional resources to your solution can be as easy as flipping a switch. For web browser-based solutions, cloud hosting has the added benefit of document access from any authenticated device.

Because many organizations find the shift in responsibilities and added benefits of cloud hosting appealing, it has become the preferred option industry-wide for many years.

Uncovering Your Document Needs

Document type and volume will be the most important aspects of determining the resources necessary for your document needs.



Document Type: The breadth of information and detail on each document and the number of pages will determine how much digital space it will occupy. Invoices, for example, are typically a single page with a fair amount of white space. Contracts, by contrast, are often several pages and full of detail.



Document Volume: Multiplies these resource requirements by every document of that type in your system.

In addition to storage, these metrics also affect the needed processing power and ready access memory (RAM) needed for processes like workflows and document capture.

Key Features to Look For



Workflow Automation: Workflow automation is a powerful tool capable of automating the indexing, storage, and archival of documents, tracking and managing retention schedules, or even routing documents through approval processes like invoices.



Advanced Search: If your organization works with high volumes of documents, advanced searching options help you find what you need. Drilling down to specific documents by layering index fields or applying Boolean logic (and, or, not, etc.) to distinguish how to layer these fields can filter out irrelevant results.



Version Control: If your documents often have different iterations throughout their lifecycle, being able to filter by document version can provide insights into what these documents contain and when.



Collaboration Tools: For documents that require revisions and edits throughout their lifecycle, the ability to add comments, redactions, stamps, and other editing marks eliminates the need to download or even print the document for these changes.



Document Sharing Tools: For documents that require revisions and edits throughout their lifecycle, the ability to add comments, redactions, stamps, and other editing marks eliminates the need to download or even print the document for these changes.



Mobile Access: With organizations looking to leverage their documents and information in an increasing number of processes, this information needs to be accessible in more scenarios, such as during service calls, conferences, promotional events, and other scenarios where mobile access would be more convenient than a desktop application.



Creating an Effective ECM Strategy

Creating an effective enterprise content management strategy involves a blend of best practices to apply to your organization's goals.

Setting Clear Objectives

To establish your goals, look for areas of improvement within your business with highly repeatable processes and a proven return on investment from others in your field. An accounts payable department may want to automate the 3-way matching or invoice routing processes. A human resources department may want to streamline the completion of onboarding forms. It's also important to understand why you're automating these processes. Is it for better compliance, improved productivity, enhanced customer service, or something else?

Identifying Stakeholders

Identifying who will be affected by this new solution ensures that their voices are heard and that their buy-in is considered, which can drastically affect the rate of the solution's adoption. Key factors to consider are who will be using the solution on a daily basis, who will be supporting it, and who will be managing change within their departments or divisions.



Establishing ECM Policies

Understanding the privacy compliance regulations and retention schedules of your area will govern how you develop your policies. Without effective regulations, it's worth considering who within your organization will need access to each document type and for how long each document will be relevant.

Document Capture and Scanning

To successfully implement any digital solution, you must be able to fuel it with the necessary data. Documents, for example, need to be indexed for easy searchability, while other solutions for enterprise resource planning (ERP), customer relationship management (CRM), and more may also need access to this data.

Document capture transforms information trapped in paper documents, PDFs, and other computer-illegible formats so that it can be used in business processes.

✓ Importance of Efficient Scanning

When it comes to document capture, scanning leaves an impression. The scanner is what the users will interact with when loading documents into your solution, and as such, a poor experience can decrease morale and the adoption of the new solution.

✓ Choosing the Right Scanning Equipment

The potential for scanner contention, fixed settings that affect file size, and lack of scalability for high volumes of documents make multi-functional printers a tool meant for casual scanning only. A high-volume desktop scanner for employees frequently loading documents into your solution is the ideal choice to optimize file size and add efficiency and convenience to the process.

✓ OCR Technology for Text Recognition

Not only can Optical Character Recognition (OCR) significantly reduce the amount of time needed to enter documents into your ECM solution, but it can also fuel additional business processes in other solutions through integrations.

By translating squares of ink into computer-legible pixels, OCR technology can help you automatically index documents and share this data with other solutions you use. The ideal scanner settings for OCR technology are 300 DPI and black and white. This allows for sufficient OCR legibility without inflating file size.



Organizing Content

Enterprise Content Management provides several efficient avenues for organizing your documents, such as folder structures, metadata and tagging, and version control. The best-designed solutions use each of these avenues in the proper scenarios.

✓ Folder Structures

Folders add layers of organization to your records, but with a well-indexed database that takes advantage of powerful search techniques, there is very little practical need for folders. They do, however, add visual comfort that makes the solution more natural to end-users.

One practical application of folders, though, is that access permissions can be applied en masse using folders, reducing the risk of leaks and ensuring protected data can only be accessed by trained individuals.

✓ Metadata and Tagging

Metadata and tagging are crucial to any ECM database. By associating documents with key information within, such as vendor names and invoice numbers for invoices or employee names and job titles for certain employee records, these records become instantly searchable using this information.

✓ Version Control

Some documents, such as contracts, undergo drastic changes throughout their lifecycle, and having multiple documents with the same metadata and tags and similar content can get incredibly confusing. Version control condenses all of these document versions into a single indexed record. By selecting a date, these documents can then be viewed as they were at any point in time.

✓ Public Access Portals

For documents that require company-wide or external access, a public portal can serve as an effective repository for employees, customers, partners, and more to effortlessly find the information they're looking for.



Ensuring Security

Many organizations work with sensitive information, including personal health, financial, and identifiable information, that can result in steep fines if not properly handled. Fines for violating HIPAA, for example, can be as high as \$2,134,831 per violation with a maximum of \$25,000 per category².

Even if your organization's information isn't protected by law, the promise of secure, careful handling of data builds trust and puts others at ease. ECM solutions offer several key ways to protect this information, including:

✓ User Roles and Permissions

By granting access to sensitive information to specific user accounts within an enterprise content management system, you ensure that only individuals trained to handle this information can view it. This narrow pool of access also reduces the risk of leaks.

✓ Data Encryption

Data encryption is a powerful tool for preventing unauthorized access to information. By locking information in a format that requires a specific key from an authorized account, all information is rendered useless to would-be hackers. It's also important to consider whether the solution encrypts data in storage, during transit, or both, as doing one without the other creates periods of vulnerability that can be exploited.

Source:

2. hipaajournal.com/what-are-the-penalties-for-hipaa-violations-7096/

✓ Compliance Certifications

Tell-tale signs that a cloud ECM provider is serious about protecting your data are the security compliance certifications they have acquired. Standard operating procedures, or SOC compliance certifications, show that organizations are fluent in the best practices for preventing and truncating breaches, while HIPAA compliance, an essential certification for using ECM in healthcare, showcases knowledge of protecting personal health information.

✓ Audit Trails

Audit trails are exceptionally useful if unauthorized activity is suspected or activity fails to adhere to best practices. These logs contain all interactions with a record over a set period of time, including who accessed the record, when it was accessed, and what changes were made.



Retrieval and Search

Search capability is one of the most essential functions for any ECM solution, but surprisingly enough, there are several variations of this functionality in the industry and some products.

- ✓ **Index Searching** allows users to filter search results for their documents by specific words, numbers, and phrases associated with the document. For example, a deal jacket for a car may include VIN, make, and model as index fields.
- ✓ **Full-Text Searching** looks throughout the entire content of each document for data relevant to your search. This form of search is incredibly useful for e-discovery, contract searching, and other searches for specific phrases and details.
- ✓ **Filters, Sorting, and Logic** can be used to further drill down on a search. For example, layered searching involving multiple keywords can be used in tangent with Boolean logic (words such as and, or, not, etc.) to show results that include, exclude, or require those additional words.
- ✓ **Document Sharing For** some ECM solutions, secure, direct access to records can be granted to individuals without typical access to a repository. These tools, including timed links and temporary access permissions, allow for flexible collaboration without sacrificing best practices.
- ✓ **Search Links Intuitive** ECM solutions sometimes allow for the creation of links that shortcut searches. This is especially useful for favoriting frequent queries and for facilitating beginner-friendly access to specific records, such as in the case of public portal systems.



Record Versioning

Files of various types will likely change throughout their lifecycle, including edits, revisions, and approvals. Tracking these changes and the various versions that result from them is essential for collaboration, recovering from unintended errors, and providing a trail during audits.

✓ Tracking Changes

Audit trails provide an entire history of changes to a record, including who made the change, what was changed, and when. These trails show auditors that you fully comply with regulatory standards and can even help determine the cause of a breach.

✓ Version History

The version history of a record allows you to see what that document looked like at any given time. This tool is incredibly helpful for looking at past terms of agreement for contracts and restoring previous versions of documents in the event of unintended changes.

✓ Restoring Previous Versions

By selecting a previous version of a record in its version history and setting it as the default version in the database using version control, previous iterations of a document can be restored as the current one.



Compliance and Legal Considerations

When it comes to managing information, there are several legal factors that can affect the features you may benefit from in a solution:

✓ Regulatory Compliance

Retention mandates for documents such as invoices, contracts, and proof of employment require these records to be held for a set amount of time. This period varies by state; by automating this process to delete documents only after their expiration, you can avoid steep fines and penalties.

✓ E-Discovery

Legal disputes are situations every organization tries to avoid, but should the need arise, being able to produce all records necessary for the case will help to bring about a swift resolution. Even documents not typically maintained in your ECM solution, such as email files, can be captured, indexed, and searched for relevant information.

✓ Data Privacy

With various types of personal information to protect and steep fines and legal repercussions for negligent breaches, account-based access permissions highly limit the possibility of breaches. Meanwhile, security measures such as encryption and cloud-provider certifications such as SOC and HIPAA compliance ensure your host is also doing their part to protect your data.



Integration with Other Systems

Well-designed ECM solutions can integrate with various platforms, so if your organization uses other solutions to manage information, it's worth considering if the two databases can be tied together. There are several highly common solution types for ECM platforms to integrate with, including:

✓ **Customer Relationship Management** or CRM solutions offer a few key integration points with ECM platforms. Buttons can be created within the CRM solution, allowing you to quickly reference documents in your ECM system, such as customer contracts and mutual non-disclosure agreements.

Buttons can also be created to scan these documents directly into your CRM and ECM solutions simultaneously to send forms to customers and automatically create documents from the collected information.

✓ **Enterprise Resource Management** or ERP solutions can receive data from paper documents, PDFs, and other file types captured and indexed into your ECM solution. This data can be used to generate payable invoices and to code records into your organization's general ledger.

✓ **Email Integrations** for ECM solutions offer several compelling use cases. Some organizations choose to have their ECM solution monitor inboxes for specific emails and automatically download, file, and index them.

Many distribution companies, for example, import delivery confirmation emails this way. Other organizations choose to automatically index and import invoices received through email this way as well.



Backup and Disaster Recovery

Backing up your data is incredibly important as it protects against disasters such as human errors, hardware failures, malware attacks, power failures, natural disasters, and more. Backups can save tremendous amounts of time and money if these events occur. In fact, 90% of businesses fail within 2 years after a disaster³ in no small part due to a loss of crucial information.

✓ Disaster Recovery Planning

Like all solid business plans, a continuity plan should begin with clear and defined objectives. Make sure to note what scenarios the plan should cover and set measurable goals to ensure your plan is meeting expectations. What level of productivity do you wish to maintain after a disaster? What profit margin do you believe your company can meet? These metrics will help you test your plan's viability in the event of a disaster to ensure it's getting results.

Setting these goals helps establish acceptable downtime. Doing so will assist significantly in deciding when and under what conditions your plan should be activated. Finally, it's time to set priorities. Understanding what business-critical functions you can support during a disaster will help maintain a reasonable revenue stream. It's also essential to account for the other processes and operations your business-critical functions rely on.

✓ Offsite Storage

Backing up your database to an offsite storage drive ensures that if a disaster occurs at one location, your data will be safe at another. With cloud ECM solutions, these backups are handled for you, allowing you to focus on more business-centric tasks and ensuring these backups adhere to best practices.



Training and User Adoption

No one likes change, and it can be difficult for an employee who has been working the same way for 20 years to see that better options are now available. Despite this, there are a few key ways to help your organization embrace its new solution.

Help End Users Feel Vested by involving them in the solution selection process. Hear their concerns and input and explain the factors that made the final decision. This will help ease concerns about the suddenness of the change and show them that you are working with their best interests in mind.



Provide Tools for Success such as knowledge bases, solution education, and formal classroom training. Some ECM solution providers offer these tools for free as a way to help their customers make the most of their solution, and taking advantage of these offers can help more apprehensive employees see the benefits and hit the ground running.

Case Studies

Kuna Food Service

Kuna Food Service is one of the largest independent, privately-owned food service companies in the Midwest, distributing wholesale to restaurants, institutional facilities, and retail locations. With immense organizational growth and a flood of invoices, purchase orders, and bills of lading, Kuna Food Service needed a better way to store these documents.

Initially only interested in document management, Kuna Foods began automating processes shortly after they began working with Square 9. Now, Kuna Foods benefits from a 20% increase in productivity filing invoices and a 50% increase in productivity during their invoice approval process.



"I am a firm believer in the product."

– **Tim Boyle**

IT Director for Kuna Food Service

Summary

Enterprise Content Management (ECM) is a system that allows businesses to store, manage, access, and distribute their information in an organized and centralized manner. With ECM, information flows freely across an organization, making it easier for employees to find and use the information they need to complete their tasks more efficiently.

In addition to increased accessibility, ECM also offers an enhanced level of security. Businesses can set up access controls that restrict who can view, edit, and share specific documents, ensuring that sensitive information is only accessible to the appropriate personnel. This helps to protect against unauthorized access, data breaches, and other security threats.

Furthermore, ECM provides a pathway for further automation, which can help save time and costs. By automating routine tasks such as data entry, document routing, and approval processes, businesses can free up their workforce to focus on more strategic tasks. This can lead to increased productivity, improved quality, and reduced costs over the long term.

While there may be some obstacles to overcome when implementing an ECM system, such as the need to train employees and integrate the system with existing technologies, the benefits of a highly efficient, effective, and productive workplace are undoubtedly worth the effort.

Future Trends in Enterprise Content Management

✓ Artificial Intelligence

Artificial intelligence is already being used by some ECM platforms to capture data from documents accurately and in a more cost-effectively scalable manner. Natural language processing, a form of AI that focuses on human writing and speech patterns, may also see use in ECM solutions as a way to search for information. Imagine if search queries could be as flexible in their wording as a conversation with a live person.

✓ Web Forms

Each consecutive generation that enters the workforce uses less and less paper, and many of the youngest professionals have been completing tasks digitally for most of their lives. Capturing information digitally via a form, transforming it into a document, and leveraging the captured data in your business processes is becoming much more prevalent as it removes the obstacles of OCR and guides users through the form completion process.

✓ Public Portals

Public portals are a highly effective tool for encouraging self-service to crucial documentation throughout an organization or community. This functionality is most useful in fields such as government and human resources, where effortless, widespread access to documentation is often necessary. As helpful as this functionality is, it previously was far too resource-intensive for many solution providers to implement. But with new ways of designing cloud infrastructure, public portals are a viable option that innovative solution providers are offering and that organizations can now leverage.

✓ Mobile Access

In an increasingly connected world where information and results are expected at a rapid rate, the ability to access information from any device has become a popular demand. With more lean technological infrastructure, solution providers can optimize their mobile experiences, implementing more advanced functionality and a more intuitive experience.



Common Enterprise Content Management Terms Glossary

It's important to note that a unique set of terminology has developed around enterprise content management to help describe some of the processes involved. Below are some of the most common terms used around ECM.

- ✓ **Optical Character Recognition:** Also abbreviated as OCR, it refers to using software to transform characters in image files into computer-legible text.
- ✓ **Capture:** Refers to obtaining data from outside sources, including paper documents, PDFs, emails, web forms, etc.
- ✓ **MetaData:** Information used to provide information about other data and commonly used to organize and categorize records in an ECM solution.
- ✓ **Structured Content:** Well defined data structured for use in certain software. A common example is a database.
- ✓ **Unstructured Content:** Data that needs a well-defined format and may be challenging to integrate into business software.
- ✓ **Archive:** Refers to a location for documents not typically used on a daily basis or, as a verb, refers to moving documents to this type of location.
- ✓ **Workflow Automation:** Streamlining and automating a series of manual tasks within business applications, such as document routing or retention scheduling.
- ✓ **Version Control:** Refers to restricting access to certain versions of a document, usually to enforce the use of the most current version.
- ✓ **Search and Retrieval:** The use of search engine functionality to locate and retrieve records within an ECM solution.
- ✓ **Indexing:** The act of applying metadata to files within an ECM solution for easier searchability
- ✓ **Audit Trail:** A record of the changes made to a database or file.
- ✓ **Compliance:** Adherence to applicable regulations such as mandated retention dates for documents, Standard Operating Procedures (SOC), and the Health Insurance Portability and Accountability Act (HIPAA).
- ✓ **Access Controls:** Refers to restricting access to records or information, usually for security or compliance purposes.
- ✓ **Integration:** The sharing of data between software solutions to add further efficiency, automation, or benefit.



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How Square 9 Can Help

Square 9 is an industry trailblazer in the field of intelligent information management, taking the paper out of work and ensuring a productive, hindrance-free environment where information can flow freely. Easy to learn, highly supported, and backed by world-class service and extensive education. Square 9 solutions are designed to help you take your organization to the next level.

Square 9's Enterprise Content Management helps you efficiently organize, and securely store all your documents in a single, searchable, permission-based data repository, ensuring effortless retrieval and virtually limitless storage capabilities.

Contact Square 9 today to find out more about using our Enterprise Content Management Platform

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