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2016 Enterprise Content Management Report

Strategically Managing Important Business Information with Enterprise Content Management Software

Q3 2016 | Featuring insights on...

» Current Trends in Data Management Among Organizations

» Features and Functionalities of Enterprise Content Management (ECM) Software

» Buying Guidelines for ECM Adopters

» A Leading TEM Software Provider

Underwritten in part by

OnBase®
by Hyland

Contents

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Introduction

The amount of information that a company must manage, in many formats and from different sources, can be staggering. Properly managing this data is a challenge for companies of all sizes and industries, but it is vital to ensure the integrity of sensitive company information. Many organizations strive to improve document management with strategies that support collaboration between departments, and with document archival that meets the standards of government and industry regulations.

Enterprise content management (ECM) technology is a strategic tool used to capture, store, and manage important business content in a secure digital environment. ECM offers document management and workflows that facilitate meaningful collaboration between organizations' back-office departments. ECM solutions also allow organizations to build uniform methods for handling a variety of content—reducing data errors, improving communication, and enhancing decision-making related to important business processes.

Many ECM solution options exist in today's market, and it can be difficult to differentiate between each solution. This report explores leading ECM functionalities and provides a guide to help organizations make educated decisions.

An Overview of ECM Software

The History – While ECM software is a relatively new category of back-office management software, it is a derivative of electronic document management systems (EDMS) created in the 1980s. Early EDMS systems comprised tools for document imaging, workflow, management, and retention. They were usually built for small-scale implementations, often with separate instances for each different back-office department. The initial goal of these tools was to get rid of paper and securely store business information. EDMS solutions were eventually applied to a broader range of business process needs, until new versions became more holistic and department-agnostic.

The term ECM was used in the early 2000s to describe a more integrated EDMS system—one that could apply to many different data types, departments, and processes. ECM software is defined by the Association for Information and Image Management (AIIM) as "the technologies used to capture, manage, store, deliver, and preserve information to support business processes."[1] Today, ECM solutions help organizations to do more than merely getting of rid of paper and storing electronic documents—they can now access and collaborate on content of all types in order to meet important business objectives.

The Use Case – While financial process solutions primarily manage structured and semi-structured documents, such as invoices, POs, and receipts, ECM software extends to many other types of semi-structured and unstructured data, including photos, videos, webpages, slide deck presentations, blog entries, Word documents, and emails. The ability to manage diverse data enables organizations to manage and store content in non-traditional document formats, and allows them to receive and manage more content from outside sources. As more organizations and systems are leveraging the web in daily business operations, the ability to properly intake and manage web-based data is increasingly important.

ECM solutions can manage documents at a both high level and granular level. These systems can manage documents for multiple business processes, including HR, AP, AR, expense reporting, and even customer-facing processes. Within these processes, the system can

[1]Kampffmeyer, Dr. Ulrich. "Trends in Record, Document and Enterprise Content Management." PROJECT CONSULT. 2004. Accessed July 19, 2016. http://www.project-consult.net/Files/ECM_Handout_english_SER.pdf

support things like application processing, insurance claims, patient charts, loan documents, employee onboarding, customer service reports, and tax documents. ECM solutions can be used to send documents back and forth within one department, or more holistically with routing between departments and individual employees.

ECM systems are also valuable for their document archival abilities. The solutions organize data in secure document libraries, and keep track of documents' histories with audit trails. The ability to securely store a variety of business information is very beneficial to companies working to comply with ever-changing government and financial regulations.

The Challenges and Benefits – Organizations adopt ECM systems to increase overall efficiency and control in their back offices. These companies are motivated by the high costs of inefficient, manual-based processes. PayStream's research shows that most North American businesses are still heavily dependent on paper in their back offices. When AP professionals were asked to allocate by percentage the amount of invoices they received in various formats, paper was the most-used format, see Figure 1.

Figure 1

Most Organizations Receive the Majority of Their Invoices in Paper Format

"How much of each invoice format does your organization receive?"

Legend:
- Paper
- Email
- Fax
- EDI/XML
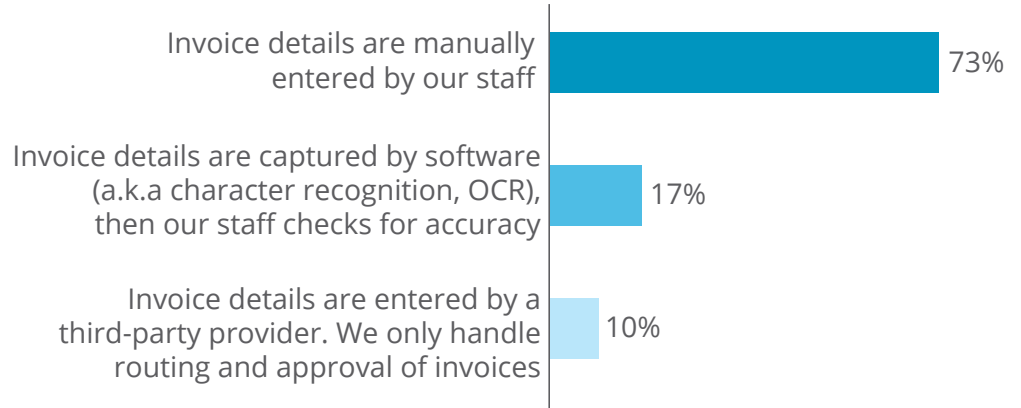- Web Upload/ Supplier Portal

Values shown: 50%, 30%, 4%, 8%, 8%
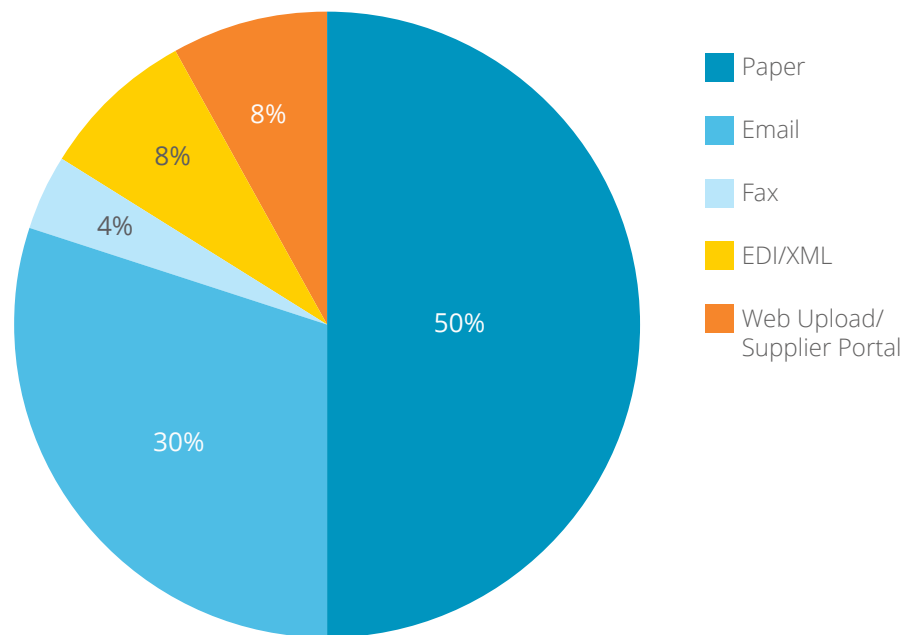
Paper-based processes are also common in expense reporting, payables, and HR processes. PayStream has also found that the majority of organizations' traveling professionals juggle paper receipts and expense reports to report their travel spend, and that most organizations still pay the majority of their payments with checks.

When organizations do try to input paper-based data into their system, most are entering information manually, see Figure 2. This process is time-consuming and prone to human error.

Figure 2

Most Organizations Manually Enter Invoice Data

"How is invoice information entered into your ERP, accounting software, or accounts payable software?"

Invoice details are manually entered by our staff — 73%

Invoice details are captured by software (a.k.a character recognition, OCR), then our staff checks for accuracy — 17%

Invoice details are entered by a third-party provider. We only handle routing and approval of invoices — 10%
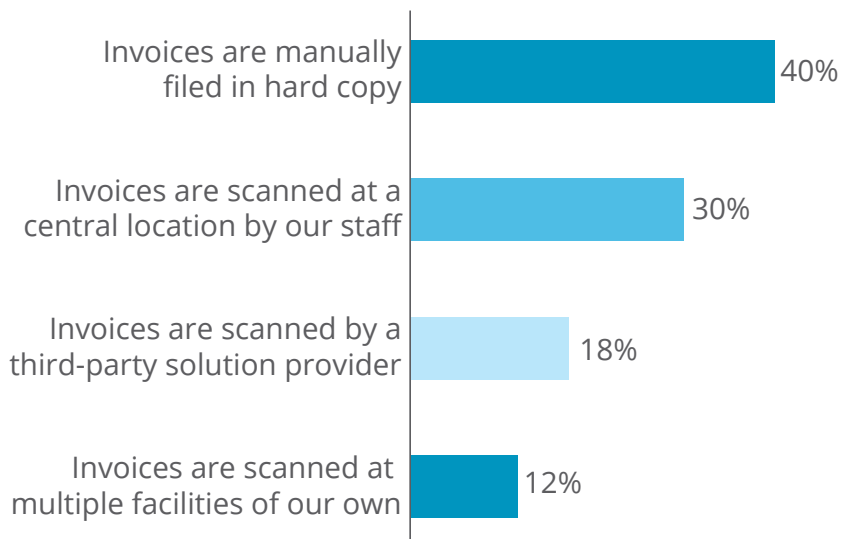
Many organizations do not enter invoice information at all, instead filing records as hard copies, see Figure 3. When important business documents are stored in filing cabinets or in individual employees' offices, employees must sometimes spend many unproductive hours tracking them down, and these items are subject to loss or theft. When documents are manually entered into a computer, most organizations do not have an efficient way of organizing the data, with documents spread across multiple systems or on many different individuals' computers. This can make search and retrieval almost as time-consuming as when files are stored in their paper format. A disorganized storage system also makes regulatory, tax, and industry compliance much more difficult, and in the event of an audit, organizations run the risk of major legal fines.

Figure 3

Most Organizations Store Hard Copies of Invoices

"How does your organization retain invoice documents?"

Invoices are manually filed in hard copy — 40%

Invoices are scanned at a central location by our staff — 30%

Invoices are scanned by a third-party solution provider — 18%

Invoices are scanned at multiple facilities of our own — 12%

ECM solutions reduce processing costs by eliminating paper, manual data entry, and lengthy, manually-driven workflows. They increase efficiency and facilitate more strategic allocation of back-office labor, and provide secure digital storage for important business documents, with extensive audit trails for compliance with governmental, financial, and industry regulations.

ECM solutions go far beyond simply managing AP, HR, expense reporting, and other financial documents—ECM also serves as a single repository for all content, collecting the information within a uniform structure. This method reduces issues of inconsistent or redundant data, and greatly improves an organization's access to necessary information. In all, ECM allows companies to control their information according to their specific business needs, with full transparency and security throughout their many departments and processes.

Today's Leading ECM Features

Today's ECM solutions come with many features, but most systems provide the following basic tools.

Data Capture

ECM uses data capture software to automatically extract content from paper documents or electronic files and input it into the system for management and storage. This process also involves organizing data using a consistent structure, which allows the system to manage content from a scanned invoice or employee application just as efficiently as from a slide deck presentation or email. There are many data capture technologies; among the most common are Optical Character Recognition (OCR), Intelligent Capture Recognition (ICR), Handprint Character Recognition (HCR), Optical Mark Recognition (OMR), and barcode recognition.

Data capture technologies are leveraged to process both manually-generated items (paper, photos, emails, etc.) and computer-generated items (EDI, XML, etc.). For manually-generated items, many ECM providers supply their clients with physical scanning hardware or a software plug-in that connects to their own scanning machines. ECM solutions also offer forms processing, which enables organizations to capture data from electronic files such as web-forms, e-forms, e-billing, EDI, and XML.

After data is extracted, the solution typically cleans up the scanned image and stores it along with the extracted data. The ECM system aggregates extracted information from all sources and inputs for indexing. Indexing and categorizing lead to better storage, search, and retrieval. Indexing is performed by users, or automatically by the system, depending on the solution's capabilities.

Document Management

Document management identifies certain characteristics and qualities of a document: What purpose does this document serve? To which department should it be sent? What user should see, edit, and approve it? How should the file be stored? Most documents in an ECM system are either active or passive. Active documents, which

could be employee applications, legal documents, and in some cases open invoices, are sent along a workflow route to different users for review, editing, completion, or approval. Passive documents are typically entered and stored with the system's retention and records management tools, and generally do not require extensive routing. An efficient document management system should give organizations full control over and visibility into where the document is routed, and should provide tools like version control, searches, and customizable organizational structures.

Workflow functions in ECM solutions, often leveraged as a business process management (BPM) tool, allow organizations to transcend traditional department, process, and system barriers to share documents and work on projects. Collaborative and groupware tools are key elements for managing active documents, allowing professionals in many different roles to take part in the documents' lifecycles, assign tasks, reroute documents, and view audit trails. Most ECM approval workflow capabilities include alerts, reminders, and escalation procedures that ensure necessary actions are taken in a timely manner.

ECM workflows are also highly configurable; they are built to adapt to an organization's existing approval hierarchies and enable complex routing. During and after initial setup of a solution, organizations can easily adjust workflows according to their own business rules, legal requirements, and document specifications. Advanced solutions facilitate this customization through visual workflow editors with detailed process flows and drag-and-drop functionality.

Storage and Preservation

Document archival provides companies with an organized, manageable environment for any business data they wish to store. This component is sometimes referred to as records management; one of the primary purposes is to securely store critical business records that apply to regulatory, legal, and industry compliance.

The ECM solution should offer a flexible archival framework that is compatible with different storage technologies (e.g., hard drives, CDs, cloud), and maintains a records retention schedule. Some ECM solutions also offer features for digital asset management, which is a tool specially tailored for storing and managing a company's digital media files. The ECM provider should also offer robust system security to protect against breaches, fraud, and loss of sensitive information.

Search and Retrieval

Sometimes referred to as library services, this function facilitates the ability to search and collect documents using advanced search methods, check in and check out documents, run version comparisons, and view audit trails. These searches and features should also be subject to role-based access controls. For example, in most cases, it would not be appropriate to allow a customer service representative to retrieve a sensitive legal or financial document normally exclusive to executive members of the company. In addition to retrieval, the ECM solution delivers documents in the formats of the users' choice, such as XML, email, or PDF.

Some ECM providers offer additional modules, including special support for email management and content and analytics tools for researching stored data. These are usually offered natively or through a third-party integration. Some of these leading functionalities are further outlined in the following section.

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Buyers' Guide—Picking the Winners

In order to differentiate between the many available ECM solutions, PayStream has provided a brief list of considerations that organizations can leverage in their solution search, highlighting aspects of technical applicability and leading features.

When selecting an ECM solution, organizations should ask…

How far does the system reach? Leading ECM solutions are compatible with web-based business operations by integrating with online platforms. Some ECM solution providers offer a content management system (CMS) module with their solution, either natively or through a partnership with a standalone CMS provider (e.g., Wordpress). CMS allows organizations to manage the content on their websites and online portals (both employee- and customer-facing). It supports online access and collaboration between users, and some of its key features include web content editing systems with templates, version tracking, workflow, and web design features for creating website tools. By leveraging a CMS system with an ECM solution, an organization has more holistic control of both its internal and online company data.[1]

Social content management is a special module that is used to better manage a company's use of interactive web platforms. This module allows the ECM solution to integrate with social platforms to monitor online document creation, providing collaborative authoring workflows and administrative features. This integration gives organizations more control over content published online, minimizing the risks that come with sharing company information in informal online environments.[3] Social content tools are available natively or through third-party partnerships.

How advanced is the data capture technology? Whether data capture is offered natively or through a partner, the level of technical capability should be carefully considered. Leading ECM providers offer a variety of data capture technologies to transform as much data as possible into a consistent, usable format. Some providers guarantee

[2]Ibid.

[3]Miles, Doug. "Managing Social Content- to Maximize Value and Minimize Risk." AIIM. 2011. Accessed July 20, 2016. http://www.aiim.org/pdfdocuments/MIWP_Manage-Social-Content_2011.pdf.

data capture accuracy rates, or provide an intelligent technology that can adapt to repetitive forms in order to increase its accuracy rates over time. Some data capture technologies can also read data in multiple languages. These tools can often be installed on desktops for each department to use, or in an organization's mail processing room for a more centralized method.

Some leading ECM providers offer mailroom services for organizations that want to outsource their document management and data extraction process. Business documents are mailed to a centralized location and processed with advanced data capture technology. In some cases, mailroom operators conduct double-blind keying, a process that involves multiple operators surveying the same document to ensure the extracted data is correct. This can often deliver the same accuracy level guarantees as a plug-in data capture tool. In all, the more services and technology the solution provider offers for extracting and processing content, the smoother the long-term management of that content will be.

Are the solution's extra components native or through a partnership? If the system doesn't have a tool, is the provider willing to create it? Not all ECM providers offer native modules for leading ECM components such as CMS or social content management. Many providers partner with leading third-party developers to bring clients these services, while others work with clients to create custom tools specific to their needs. It is important for organizations' IT teams to measure the technical flexibility of both the provider's and partners' systems, and also to evaluate the provider's willingness to adjust their own solution to the clients' existing systems.

How does the system make information accessible to existing systems? Leading ECM solutions will seamlessly integrate and coordinate with organizations' other business process systems. Some ECM solutions provide access to information through independent desktop clients, while other solutions integrate directly with existing applications so that users do not have to leave the solution they're working in for ECM services and data retrieval. Depending on an organization's plans for the ECM solution, they should evaluate a provider's integration capabilities to determine if it fits with both their IT environment, and their workforce needs. For some organizations with highly mobile workforces, another important consideration is whether the provider offers a mobile version of their solution.

How strong is the data security? The strength of an ECM solution's security measures are vital for preserving the integrity of a company's information, and organizations should be diligent in their search for a provider that makes security a priority. Providers should conduct regular system audits, and should have multiple security certifications and partnerships with outside security and compliance experts. Some additional security controls within the solution itself can include electronic signature integrations, data encryption for content in transit (SSL/TLS) and in storage, and roles-based access controls.

Is the provider experienced and versatile? It is just as important to look at an ECM provider's track record as it is to look at their solution. Organizations should evaluate the provider's versatility by reviewing their experience with the organization's own business type, industry vertical, geographic location requirements, and company size. They should also measure the solution's ability to integrate with different financial system/ERP systems, and whether it offers support for several different languages and currencies—if applicable. Organizations should also review a provider's implementation agendas and average timelines, training methods, and support programs offered both during and after implementation. By judging the provider by these holistic elements, an organization will increase the likelihood of an open, successful relationship with the provider—and a smoother transition from manual to automated information management.

In all, ECM adopters should not settle for a solution that is not perfectly suited for their specific business and industry needs. Organizations should work to find a provider that is flexible and capable in order to ensure the long-term success of their information management.

To further aid in the selection process, the following profile highlights the features of one of today's leading ECM solution providers.

OnBase by Hyland

For over 25 years, Hyland, creator of OnBase, has helped organizations streamline everyday business challenges. Hyland's document management solution, OnBase, is a single enterprise information platform for managing content, processes, and cases. OnBase provides ECM, case management, business process management, data capture, and enterprise file sync and share all on one platform. OnBase allows customers to bring disparate documents and information together for a holistic view of their contracts, vendors, and business processes. The simple, open configuration of the OnBase system allows customers to simplify their IT environments and easily tailor solutions for specific departments.

Founded	1991
Headquarters	Westlake, OH
Other Locations	Irvine, California; Sao Paulo, Brazil; London, United Kingdom; Tokyo, Japan
Number of Employees	2,050
Number of Customers	15,025
Target Verticals	Manufacturing, Transportation and Warehousing, Professional Services, Real Estate, Rental and Leasing, Accommodation and Food Service, Healthcare, Higher Education, Insurance, Financial Services, Government
Partners / Resellers	DataBank, Konica Minolta Business Solutions, KeyMark Inc., Requordit
Awards / Recognitions	Leader in the Gartner Magic Quadrant for Enterprise Content Management for six consecutive years; Leader in the Forrester Wave: Transactional Content Management Services, Q2 2015; Strong Performer in the Forrester Wave: Dynamic Case Management, Q1 2016; Hyland is #48 on the Fortune 100 Best Companies to Work For in 2016.

Solution Overview

OnBase can be deployed as an on-premise or hosted solution. The solution provides no-code integration capabilities with multiple ERP systems including SAP, Oracle, and others. OnBase also has a complete set of API level libraries available in COM/.NET, Java, and SOAP/Web Services that allow programmers to leverage OnBase functionality from custom-built applications.

OnBase allows users to restrict who can see documents and data, and what actions they are able to perform with the information. Additional security features include audit trails, Docusign and CEC Integrations for electronic signatures, data in transit (SSL/TLS), and means of encrypting data in storage.

OnBase provides mobile capabilities through client apps for iOS (iPad and iPhone), Android, and Windows. With the OnBase app, users can access documents and electronic forms, and make business decisions.

OnBase features native capabilities for scanning and importing all business document types, including invoices, remittances, and standardized insurance and healthcare documents. Once documents are in OnBase, the solution natively performs template-based OCR and automated indexing. OnBase also provides intelligent capture for semi-structured documents to improve both indexing and data entry into back-end systems. With intelligent capture capabilities, OnBase can capture data regardless of where it is located on the document, including line-item details and handwritten characters.

Document scanning and indexing is completely integrated within OnBase. Hyland offers various capture methods, including ad-hoc scanning from desktops, remote locations, and front-office functions, scanning with a third party application, MFP integration for high-volume scanning, and email-based capture. The capture method recommended for each customer depends on factors like location of capture, volumes, document quality, document characteristics, and indexing requirements. Hyland also offers mailroom services through its Imaging Services team for customers that wish to outsource the data capture process.

OnBase Workflow is based on a business-rules engine that can adapt to any business structure. It is easily configurable, allowing business-level users to rapidly create and deploy complex workflow hierarchies on demand. OnBase Workflow supports workload balancing by user or role, as well as out-of-office forwarding.

OnBase further streamlines document processing by providing users with a simple view of documents' lifecycle queue. When a user selects an item from the list of outstanding work, the OnBase Workflow interface immediately presents a list of related items to assist the user in researching the work item. For example, if the user selects a loan application, they could be presented with the applicant's W-2 Form, credit report, and wage statements.

OnBase archives client content with advanced document archival methods that allow storage of many file types, and preserves the content according to the client's specifications. The solution is also built with strong security features that ensure the protection of sensitive client information for as long as the documents are stored. Hyland will also destroy document files upon client request.

Users can retrieve stored documents in seconds using a variety of search parameters, including by keyword, dates, and document types. Users can also create custom searches, use a cross-referencing tool, and perform full-text searches. The system also has the capability to search for features, such as if users would like to find the feature for completing a vacation request or work ticket.

Implementation and Pricing

Implementation times for OnBase solutions vary by solution and customer needs. During implementation, OnBase offers a variety of on-site and online training classes and events for both end users and customer trainers. Customers can access detailed documentation and user guides, as well as training and user community websites that provide a place to learn more about OnBase and collaborate with other users. Throughout the business relationship, OnBase offers customers dedicated support from Account Management teams, as well as 24/7 access to Technical Support.

The licensing and pricing of OnBase is designed with diverse customer needs in mind, allowing for à la carte purchases of modular components that depend on which OnBase solution the client is currently using. When the size of an institution or other unique factors dictate, negotiated enterprise licensing is available based upon client metrics that may include number of employees or asset levels.

About PayStream Advisors

PayStream Advisors is a technology research and consulting firm that improves the way companies plan, evaluate, and select emerging technologies to achieve their business objectives. PayStream Advisors assists clients in sorting through the growing complexities of IT applications related to business process automation with the goal of making objective, analytical, and actionable recommendations. Wherever business process automation technology is an issue, PayStream Advisors is there to help. For more information, call (704) 523-7357 or visit us on the web at www.paystreamadvisors.com