



ECM TECHNOLOGY VALUE MATRIX 2017

ANALYSTS

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THE BOTTOM LINE

Enterprise content management (ECM) has experienced another disruptive year with multiple mergers, expansion of compliance for regulations regarding personal information privacy, and a distinct shift from stand-alone applications to embedded or integrated platforms, defining the adaptability of competitors in the space. Companies must continue to evolve with the current business landscape to meet the changing demands of end users. This year, businesses are looking to continue a digital transformation for the marketplace either with the incorporation of ECM into other applications or becoming the lead application with the addition of business processes into the ECM platform.

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Enterprise content management is the systematic collection and organization of information that is to be used by a designated audience – business executives, customers, etc. Neither a single technology nor a methodology nor a process, it is a dynamic combination of strategies, methods, and tools used to capture, manage, store, preserve, and deliver information supporting key organizational processes through its entire lifecycle.

In this Value Matrix, Nucleus evaluates top ECM vendors based on the usability and functionality of their products, with the goal of providing readers with a comprehensive view of the marketplace. Nucleus has identified the defining feature of ECM products in 2017: their ability to integrate with other business software tools. When ECM software is incorporated into the workflow of employees within

business process management (BPM) or sometimes customer relationship management (CRM) applications, user adoption and employee productivity greatly increase.

Business process management is a systematic approach to making an organization's workflow more effective, more efficient, and more capable of adapting to an ever-changing environment. With the coupling of BPM and ECM software, users have more intuitive access to necessary information, require less training, and get more value from the solution.

There are two main ways that ECM products are fitting into an integrated enterprise software environment: as a *lead application* or as a *background application*. A *lead application* focuses primarily on ECM capabilities but has been modified to include BPM or other processes. It is an expansion of the ECM platform designed to take on more business needs with one interface. In other words, users are still interacting primarily with the ECM system but will find increased functionality within the product encompassing other business needs.

A *background application*, on the other hand, subordinates the ECM product to playing an embedded role within a different application. A user will mainly interact with a BPM application, for example, but will find that ECM functionality is working behind the scenes to expedite workflow and keep enterprise content organized.

Most integrated applications still lean towards the *lead application* side because of their previous status as standalone ECM products. These companies' products still retain their identity as primarily ECM-focused but are moving in the direction of the integrated business environment. As time goes on, however, Nucleus predicts that more ECM products will be integrated into other products as *background applications*, whether through company acquisitions or a large-scale redesign of a standalone product.

MARKET TRENDS

Nucleus has identified five features of ECM products that differentiate vendors and are areas of change in 2017: deployment options, intelligent capture, auto-classification, integration, and governance. Leading vendors usually establish common market practices by working vigorously to improve these areas identified as customer needs. As they become industry standards, slow-to-adapt vendors will fall further behind and will struggle to retain their identity within a broader context of integrated solutions.

DEPLOYMENT OPTIONS

The cloud continues to prove that it is the most effective deployment method for ECM software. Many legacy systems, however, are on-premises. In some cases, such as rural locations with inconsistent access to a cloud-based system, on-premises may be necessary to maintain uncompromised uptime. Some companies have opted for a hybrid deployment with certain information stored on-premises and certain information stored in the cloud. Nucleus predicts that this practice will continue to decline due to the prevalence of cloud deployments for first-time customers.

INTELLIGENT CAPTURE

With enterprise content being generated in multiple formats and being integrated from multiple sources, it is important that an ECM product can smoothly pull together disparate types of information. One key feature of such a product is repository agnosticism, which eliminates the need for data migrations.

AUTO-CLASSIFICATION

With more companies exploring the uses of artificial intelligence and embedded analytics, ECM vendors are leveraging these technologies to automate the process of classifying, tagging, and sorting enterprise content. Automating manual processes like these boosts accuracy and saves time.

COMPATIBILITY

ECM products almost always function within a business environment with multiple enterprise software products. ECM tools must play well with others. Data streams from other applications and business software using data from the ECM application both need to be compatible with the ECM system itself. Ensuring that an ECM product fits within the overall technology structure of a customer's company should be painless and mostly taken care of by the vendor in their own product's design.

GOVERNANCE

With the greater integration of the ECM into employee workflow, improved governance is a natural outflow. Employees are automatically guided toward relevant information, helping them to be more efficient, but also ensuring the safety of the company's information. This issue is becoming even greater with increased regulations being adopted globally, such as Europe's upcoming expansion of its consumer data protection laws.

METHODOLOGY

It is important to understand how placement in the Matrix is determined. Each company's position is relative to the market, with the center point marking the approximate averages of usability on the vertical axis and functionality on the horizontal axis. A company's position, therefore, shows its performance in these two metrics against its competitors. A change in position from previous Matrices does not necessarily indicate that the product has increased or decreased in one of these areas *absolutely*, but rather that it has changed *relatively*.

Our focus on evaluating usability and functionality refers to the inherent capabilities of the product as it is designed to function. A company in any quadrant may thus present a compelling business case in some scenarios based on a company's financial constraints and technological needs, although the product may have overall less usability and functionality than other solutions.



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Usability and functionality are evaluated based on the historical performance of a solution since our last Value Matrix. We draw from customer feedback, product demonstrations, and conversations about the market with vendors and users. Much more information about the methodology of the Matrix is provided in our research document “Understanding the value matrix” (Nucleus Research, *r59 Understanding the value matrix*, April 2017) and should be reviewed carefully before reading through this document. It is available for free download on our Website in the research directory.

LEADERS

Vendors in the Leader quadrant exhibit strong functionality and usability and are recognized for innovation and an additional range of capabilities in response to user needs. Leaders in this Value Matrix include Box, Digitech Systems, Hyland, Laserfiche, M-files, Microsoft, and OpenText.

BOX

Box was founded in 2005 and is based in Redwood City, California. It continues its commitment to improving usability and functionality. It leads the pack on cloud content migration with consistent simplicity of use, low cost, and accelerated digital transformation. Box Zones enables global businesses to use Box as their content management platform while storing their data in their local region, assuring regulatory compliance specific to their needs

For deployment, Box Shuttle manages data migration to the cloud, making use of intelligent capture and classification to ease the process. Through Box Shuttle, companies can make unique content management plans that suit their individual needs for the initial data migration and set-up. Box Shuttle has excellent integrations, making it simple to hook up various data streams to the company’s repository.

Recently, Box added features that allow individuals to create custom business processes to simplify workflow, making Box a front-runner in the push to integrate ECM with BPM. It has also improved its collaborative function, Box Notes, which allows interacting with a single document. Box’s strategy of continual investment in functionality and upgrades for content management has transformed the company into a robust cloud-based content management service.

Box’s partnership with Microsoft is facilitating a transition to full-service cloud content management, with better collaboration, sharing, and global access. Box will also have access to greater AI and machine learning through Microsoft Azure.

DIGITECH SYSTEMS

Digitech Systems was founded in 1997 and is based in Greenwood Village, Colorado. It is largely concentrated in the healthcare market, offering excellent workflow management, intelligent capture, support, and policy-based governance. Digitech has recently made improvements to security, workflow application, and business rule capability. The recent release and upgrade, and response to customer requests have produced enhanced usability, especially for mobile devices, and a unique interface that can be customized for each user was also a part of this past year's release.

Although Digitech appeals to a niche market, its rapid deployment, focus on Europe's General Data Protection Regulation (GDPR) compliance, integrated BPM functionality and consistent customer support make it a strong vendor. It has many features that are specifically applicable to healthcare data management, such as patient information rights, confidentiality, and personally identifiable information.

HYLAND

Hyland was founded in 1991 and is based in Westlake, Ohio. Its ECM product OnBase, is an easy and flexible application with seamless integration, helping users work more intuitively with their content. OnBase has consistently high customer support and the application has excellent capture and scanning capabilities. With a vast number of partners, OnBase has robust customizability. Hyland expanded its extensions of OnBase this year to include ShareBase with strong out-of-the-box functionality through fast cloud deployments. It is mobile accessible and has an easy and effective search engine with enterprise file sync and share (EFSS) functionality for collaboration with internal and external parties. The AirBase offering is designed for companies with limited internal IT resources by handling much of the configuration on the back end through the cloud. Security can be handled at the user level. Overall, Airbase functions similarly to OnBase, Hyland's flagship product, but with a lightweight deployment targeting the needs of small to mid-sized businesses.

In the 2017 release, Hyland focused on improving user experience through customer driven changes. The release included improvements to capture/indexing functionality, BPM tools, electronic form processing, and security.

Hyland's recent acquisition of the Perceptive portfolio from Lexmark, has been finalized and the company has committed to supporting its content solution and providing new product releases as well as compatibility upgrades. Although Perceptive and Hyland share similarities, this acquisition could cause some problems, however, and several clients voiced concern. There are differences in

deployment strategies, repository capabilities, and code-lines, potentially leading to clashes between the resultant parallel platforms.

LASERFICHE

Laserfiche, a privately held company, was founded in 1987 and is based in Long Beach, California. It offers a modular product with strong application integration and compliance. Laserfiche is one of very few ECM vendors with strong, organic annual revenue growth without mergers or acquisitions. Laserfiche users benefit from frequent updates and releases across on-premises and cloud deployments. The ECM solution's high rate of usability is due in part to a common code base, relatively simple customization, field auto-population, rapid deployment, and a robust mobile application, among other factors.

Their most recent update, release 10.2, delivered improvements to various modules such as the availability of 102 templates in the Business Process Library to condense ramp-up time for new users. Additional enhancements and upgrades include invoice processing using auto-generated metadata directly from documents, a real-time collaboration tool called Discussions, personalization of the mobile application, and further advancements to metadata customization and search capabilities.

Laserfiche ECM has a BPM workflow component which automatically routes and processes new documents to help users create customized applications. Laserfiche security is applied at the user, document, and system levels and is well positioned for assisting clients with GDPR compliance.

Laserfiche is sold exclusively by a strong resellers network of more than 450 value-added resellers (VARs). This allows the company to focus a greater percentage of its financial resources on research and development. Laserfiche users are uniformly loyal and the annual retention rate approaches 96 percent. However, some customers have reported that several product features are shared between multiple modules, making selection choices unnecessarily complicated.

At the Laserfiche Empower conference, the company focused on the ubiquitous ECM theme of the "digital transformation journey," introducing a five-step roadmap to digital success. Laserfiche's primary goals to that end are moving all customers to greater control, automation, and eventual transition to the cloud. The five stages are: digitization, organization, automation, streamlining, and transformation. With that said, it continues to offer on-premises deployments for companies still unable to move to the cloud.

M-FILES

M-files was founded in 1987 and is based in Tampere, Finland. It has a strong user interface that is easily customized and integrated with other applications. The product is repository agnostic and has metadata-driven search capability. It has many of the important new features of ECM such as intelligent capture, auto-classification, and context-driven BPM. The M-files metadata driven architecture search function focuses on the context of a document – the “what” versus traditional folder search that focuses on the location – “where”, delivering faster and more relevant access to data.

M-Files ECM solution simplifies GDPR compliance by assisting companies in the management and control of personal data. M-Files automates this process for businesses and provides supporting information for GDPR auditors.

The release of M-files 2015.3 allows users to search multiple vaults, continues metadata enhancements, improves the speed of many daily operations, and provides advanced performance monitoring tools. This release also improves application program interface (API) integrations and mobile applications.

Customers have reported that M-files has consistently improved usability and has strong user support. Some users have indicated that there is a minor learning curve to the product, but that overall, usability is very good.

MICROSOFT ECM SUITE

Microsoft was founded in 1975 and is headquartered in Redmond, Washington. Its ECM products, including SharePoint and OneDrive for Business, offer excellent functionality and are seamlessly integrated with other Microsoft products. Microsoft Flow is the automation engine for workflows across the ECM Suite with multiple templates and code-free design. The ECM Suite has basic BPM functionality and is easily scalable. However, some customers have reported that the product is difficult to configure and customize without expertise. The product is offered as a cloud, on-premises, or hybrid deployment, with cloud integration through the OneDrive for Business application.

SharePoint and OneDrive enable lifecycle content management with the use of the capabilities of Microsoft Office 365, allowing content to be found, consumed, and governed across all of Office 365. However, some users have noted that compatibility can be an issue for SharePoint and OneDrive. All Web browsers—such as Safari, Chrome, and Firefox—are supported but some customers report that working with non-Microsoft documents can be tricky and have struggled with certain browsers. In light of 2017 product releases and enhancements to browser

compatibility, Nucleus believes that these issues may stem from users who are still on older versions of SharePoint and have not taken advantage of recent updates.

Security needs are addressed via the Office 365 records retention and policy capabilities in the Microsoft Security & Compliance Center, allowing an administrator to centrally define a policy and enforce document retention and deletion rules. GDPR readiness can be assessed by an on-line self-evaluation tool located in the Microsoft Trust Center available to Office 365 users. For customers who are happily committed to using Microsoft products, SharePoint and OneDrive are excellent extensions of the Office experience.

OPENTEXT

OpenText was founded in 1991 and is based in Waterloo, Canada. It features excellent out-of-the-box usability with an intuitive user interface and modules that give clear choices to clients. Functionality has continued to grow with a focus on extending ECM into business processes, and leading applications that support these business processes. In doing so, OpenText solves many of the problems that plagued ECM deployments, by automating the application of metadata, eliminating adoption issues, and capturing and providing content in the context of business processes.

Regulatory compliance and security are robust, and while OpenText assists and advises clients along GDPR guidelines, it correctly does not guarantee compliance with their product. GDPR is a complex, evolving target and each user shares responsibility for compliance.

In January 2017, OpenText acquired Documentum, the ECM branch of Dell EMC. The acquisition significantly expands OpenText's customer base, information archives, and key verticals. There appears to be a minimal overlap of the products and OpenText had committed to long term support of Documentum platform. Additionally, the OpenText partnership with Microsoft provides deep insights into roadmaps, API's, and early technology adoption programs giving it the capability to deliver products and integrations with and sometimes even prior to the general availability.

Magellan, an AI-based predictive analytics platform that combines open source machine learning with advanced analytic capabilities, and business intelligence to provide for better decision making and task automation, was recently released by OpenText. The company has also acquired Covisint Corporation, a cloud platform with IoT applications. This acquisition is expected to expand OpenText's presence in the automotive industry and will be integrated into its business network.

OpenText is expanding beyond the traditional ECM market to encompass enterprise information management, solving business problems that span structured and unstructured data, while adding investments in Analytics, Internet of Things (IoT), case management, and cloud services. As OpenText continues to acquire and build additional process automation, it will continue its leadership position as a formidable player.

EXPERTS

Vendors in the Expert quadrant have a focus on functionality. They provide high-powered capabilities to their customers but are often better suited to technical users or users with significant experience with similar software. Often, companies that have been operating in their industry for a long time and have advanced technology needs benefit the most from the expertise brought by these vendors. Experts in this Value Matrix include Alfresco and IBM Content Manager.

ALFRESCO

Alfresco was initially released in 2005 and is based in Palo Alto, California. It is an advanced solution that appeals to technical buyers and developers. It has a robust search engine based on content and metadata. The product is currently offered as three deployment options. It features a clear and straightforward user interface. Alfresco has begun introducing BPM and governance functionality into their product with the Alfresco Process Service and Governance Service, which have both been effective according to customer feedback. Customers also highlighted strong collaborative tools. Compliance and support have both been noted issues for Alfresco.

The product is based on an open-source platform that is greatly customizable, making it an attractive option for companies with large internal development resources. Alfresco also does their own customization for specific industries such as finance, government, and healthcare, improving the business case for companies looking for more specific out-of-the-box functionality.

In February 2017, Alfresco announced its Digital Business Platform, which aims to integrate the various open source elements of process management, content management, and governance, creating a unified platform.

IBM CONTENT MANAGER

IBM was founded in 1911 and is based in Armonk, New York. Its Content Manager is a robust and scalable application that fits well with other IBM products and is most appropriate for large scale enterprise environments with the ability to manage

complex configurations. IBM has a strategic partnership with Box that leverages Box's EFSS capabilities for content collaboration. IBM product is offered as a cloud, on-premises, or hybrid deployment.

Although the Content Manager is powerful, it is not very intuitive and requires significant technical expertise to configure and modify. Several users noted that the Watson analytics offering was confusing for ECM options.

FACILITATOR

Vendors in the Facilitator quadrant provide high usability for their customers, prioritizing user adoption over high-end capabilities. Facilitators tend to be preferable to companies with a large and diverse user base, limited time for training, or little experience working with similar software. Companies new to ECM software will derive much greater value from getting users to work efficiently with a simple product than suffering from poor user adoption of a sophisticated product. Facilitators in the Value Matrix include DocStar, Docuware, Egnyte, Fabasoft, and HPE.

DOCSTAR

DocStar was founded in Schenectady, New York in 1996. DocStar's ECM and business process platform are available as on-premises and cloud deployments. DocStar was acquired by Epicor Software Corporation in January 2017, and its ECM product is now a part of the Epicor ERP solutions portfolio giving it strong integration with the company's other products. DocStar further extends Epicor's "cloud first" strategy, a key part of its utilization of automating document and form based processes within an organization. In addition to serving the Epicor client base, DocStar continues to invest in and support the non-Epicor customer base.

Since DocStar was acquired, functionality and usability are beginning to improve, a trend that Nucleus expects to continue over the course of the year. Being a part of the Epicor organization has enabled DocStar to leverage Epicor's capabilities in areas such as business analytics and mobile platforms, and continue to develop additional out-of-the-box solutions for processes automation. The product is repository agnostic and uses autotclassification to simplify manual processes. Security is simple and based solely on user permissions. Although the product has high usability, customer support has been inconsistent, but more recent users have noted improvement in the support function.

DOCUWARE

Docuware was founded in 1988 and is based in Germering, Germany. It has basic document management capabilities, but does feature good workflow management. The application is well integrated with mobile apps and has an intuitive drag-and-drop interface. Much of compliance and security is automated within the product. There is integration with Microsoft Outlook which has been integrated into the dashboard display with activity tracking.

Docuware's product is divided into several modules to make customization easier, and it also offers a software developer kit to help customers manage customization themselves. As such, Docuware is best geared towards small-and-medium-sized businesses with its out-of-the-box functionality and menu-driven configuration.

EGNYTE

Egnyte was founded in 2007 and is based in Mountain View, California. It has a highly usable product with intuitive out-of-the-box drag and drop capabilities. It has robust collaborative tools and a strong mobile application. It is a cloud-based product, but can support hybrid deployments. It has tight integration with Microsoft Office. Smart searching simplifies the basics of file synchronization and sharing (FSS) through effective use of metadata. Egnyte Protect is also a cloud-based governance solution that identifies sensitive data and enforces access policies across multiple repositories. For European Union clients, Egnyte stores personal information in its European data center, and is well positioned to meet GDPR in May 2018.

Egnyte Connect, the FSS product, is mobile integrated and works well for remote workflows. Customers report excellent support. Egnyte's governance application, called Egnyte Protect, is cloud-based and functions across multiple repositories. Although Egnyte is still focused on core enterprise FSS uses, it is steadily expanding its functionality.

FABASOFT

Fabasoft was founded in 1988 and is based in Linz, Austria. It features an intuitive and easy-to-use interface. It is integrated with Microsoft Office and has built-in predefined BPM processes. Searching is easy and driven by metadata. Fabasoft has a much larger presence in Europe but is beginning to break into the U.S. market. As such, they have greater security and compliance with European GDPR than other similar vendors.

Fabasoft's June product update focused on big data capabilities for security and compliance, as well as expanding workflow and digital management organization.

HPE

Hewlett Packard Enterprises is an information technology company founded in 2015 as part of the splitting of the Hewlett Packard company. and is headquartered in Palo Alto, California. Its Content Manager is a governance-based application that is designed primarily for those highly regulated enterprise businesses such as government, healthcare, and financial services. It has excellent compliance and information security capabilities and has invested significantly in preparing for the upcoming European GDPR data security laws. The HPE Global Policy Center monitors global regulatory activity and imports any changes into HPE Content Manager for application of policies, maintaining current data sovereignty rules.

The application has a single-sign-on system, boosting integration, usability, and security. The product features auto-classification and indexing. The policy and regulation awareness for customers makes the product especially effective for any enterprise with emphasis on security and compliance. In addition to managing content, HPE manages risks and creates business value with vigorous collaborative tools, best practices, contextual data mining, and enterprise searches across multiple platforms.

HPE has announced a spin-merge with Micro Focus to create a pure-play enterprise software company. This is scheduled for September 1, 2017, and is expected to become the seventh largest software company in the world.

CORE PROVIDERS

Vendors in the Core Providers quadrant have products that revolve around the essentials of ECM solutions. They are often effective choices for new customers with limited experience in the ECM market, as in many cases they offer lightweight solutions at a compelling price. The business case for purchasing in the Core Providers quadrant involves identifying niche advantages for certain vendors and carefully analyzing what capabilities the customer really needs, as opposed to a more advanced but often pricier solution. Core Providers in this Value Matrix include Accellion, Amazon Web Services, Dropbox, Google Drive, and Spring CM.

ACCELLION

Accellion was founded in 1999 and is headquartered in Palo Alto, California. Accellion knitworks features a private cloud, secure content collaboration platform with strong security controls that integrates with data loss protection (DLP) solutions. With a modular multi-tier architecture, siteworks also provides organizations with a highly scalable and flexible solution.

Encryption keys are owned by the user business, mitigating unauthorized access and the solution provides geographic policies to meet data residency policies. It is not apparent if this is adequate to meet GDPR requirements, but it does meet the requirements for other industry standards and government regulations.

The knitworks application specializes in mobile file sync and share, with minimal IT set-up needed. Customers have provided mixed feedback, with some indicating a poor user interface as a trouble spot.

AMAZON WEB SERVICES

Amazon was founded in 1994 and is based in Seattle, Washington. Its ECM product, ElasticFile, was released in September 2016 to fulfill the role of a private cloud file storage system. It is tightly integrated with the AWS platform and is fully managed by the vendor. It is both fast and scalable.

On the other hand, customers feedback shows that the product has heavy limitations in functionality and only works through Amazon EC2. With a relatively high price tag, it may only fill the ECM role for companies already well integrated within Amazon Web Services.

DROPBOX

Dropbox was founded in 2007 and is headquartered in San Francisco, California. Dropbox Business is easy and cheap, with pure FSS capabilities that target only core ECM needs. While it gets the job done for small businesses, it has limited functionality, issues with the interface, and poor security. Customers report very poor support.

In June 2017, Dropbox announced a network expansion including a custom-built infrastructure moving from Amazon Web Services. This change is expected to improve the user experience by keeping down costs and speeding up delivery.

GOOGLE DRIVE

Google was founded in 1998 and is headquartered in Mountain View, California. Google Drive has improved significantly in the past year. It has good out-of-the-box usability, has good archiving capabilities and is inexpensive, making it a good choice for companies that do not need a fully-fledged ECM solution or have limited needs and resources.

Google Drive works best in conjunction with other Google products like Gmail because of their inherent integration and synchronization features. Customers report that support is lacking, however, and that there are issues with alerts,

redundancies, and duplications. Overall, Google Drive performs basic collaboration and FSS functions well but does not go beyond core ECM.

SPRING CM

Spring CM was founded in 2005 and is headquartered in Chicago, Illinois. Its ECM and Contract Management product offers great functionality but sacrifices some usability. Customers emphasize the quality of the collaboration tool and consistently high customer support. The product focuses heavily on contracts but somewhat neglects other aspects of ECM.

The biggest disadvantage to Spring CM is the non-intuitive method needed to search the database, which uses folder location instead of content. This non-intuitive approach, while effective once learned, requires users to change the way they organize their own information for faster searching. The focus on contracts means that the product will have varied appeal among prospective customer based on the degree of contract versus other content needs present.

In the May 2017 product update, Spring CM improved their workflow designer for BPM, which is currently usable in its by-request beta form. Spring CM also improved their Doc Launcher References to manage confirmations, forms, and field libraries. A planned change for Spring CM is document previewing, which will improve usability and clarity for users.

MORE ABOUT THE MATRIX

The Nucleus Research Technology Value Matrices are published at least once a year in Nucleus's core research areas. Through the analysis of end-user experiences, vendors are evaluated on both usability and functionality – key drivers of value – and placed into four categories: Leaders, Experts, Facilitators, and Core Providers. The customer can use the Matrices to evaluate vendor short lists as well as to make the case for maintaining existing applications. The Matrix is designed to provide a view of the relative value of competing solutions that are aligned with the buying cycle. For more information, please refer to the above-mentioned guide *r59 – Understanding the value matrix*, April 2017.