



# The Aragon Research Globe™ for Enterprise Content Platforms, 2020

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**Topic:** Enterprise Content Platforms (ECP), Intelligent Content Analytics

**Issue:** Who are the enterprise content platform providers and how will they evolve?

How will the intelligent content analytics market evolve?

May 14, 2020 | Research Note 2020-19



## SUMMARY

Aragon Research releases its third Aragon Research Globe™ for enterprise content platforms. It examines 12 major providers in a market that is shifting its focus to an AI-centered intelligent content analytics solution.

### Key Findings:

**Prediction:** By YE 2024, 50% of large enterprises will reduce the number of ECP vendors in their enterprise by half (80% probability).

**Prediction:** By YE 2023, 60% of ECP providers will support the storage, management, and analysis of video content (70% probability).

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## Introduction

Enterprises today are in a race to become digital, and that means looking at all of their current systems and evaluating what needs to be done to automate processes and speed things up. The enterprise content management market shifted to a platform approach last year. It is serving many providers well that adopted a market approach, which includes content services and intelligence (e.g., artificial intelligence). We look at this market as being in transition from a focus on managing content to one of processing and automating content. This research note overviews the current state of the ECP market, defines the new shift to content platforms, and evaluates 12 vendors in the enterprise content platform (ECP) space.

## The Current State of Enterprise Content

The enterprise content platform architecture that we defined in 2018 is still being built out by many providers. There is no doubt that content analytics is helping to drive deals and a renewed solution focus in areas such as insurance claims. The content analytics market for many providers is still in its infancy, and many are partnering with providers such as Amazon, Microsoft, and Google for text analytics and image analytics algorithms.

Automation is also an area of opportunity that we will discuss later in this report. A large number of enterprises are looking to augment existing providers or replace them, and this has become a playbook for many providers—replacement campaigns.

In 2018, Aragon defined the enterprise content platform, and in just over a year, the demand for providers who can meet the need to put content in motion has surged (see Figure 1). As the need to automate and manage all forms of content intensifies, providers will add the ability to include more content types and find insights via content analytics using AI; the final piece will be to automate the front-end of the process while maintaining the back-end.



Figure 1: The Aragon Research enterprise content platform architecture is a modern approach to content automation.

## Content Management Proliferation Creates an Opportunity

Years of ignoring the spread of content management platforms in the enterprise has led to the realization that a majority of enterprises often have twice the number of content management platforms they need. The issue today for enterprises is finding ways to automate processes to help generate revenue faster. In the course of digitizing their content processes, enterprises still have the opportunity to reduce the vendor footprint and retire vendors who are not innovating their content platform.

**Prediction:** By YE 2024, 50% of large enterprises will reduce the number of ECP vendors in their enterprise by half (80% probability).

## Content Storage Becomes Commodity

Part of the reason for the shift to automation is the realization that documents and the processes associated with them can slow down an enterprise. The rise of digital transaction management and automated paper signing has led to the growth of many new providers, and it is a market that many ECP providers ignored.

Content storage has become commodity, and it is no longer strategic. Because of cost efficiencies, this is another reason that enterprises should take a look at their current contracts and look to reduce both the number of providers and the cost of just storing documents and images.

## Managing Video Content

While storage has become commodity, storing content has also become about rich media. Many enterprises have realized that video and image content is growing as fast or faster than traditional text content. This is putting pressure on enterprises when it comes to managing all types of content. This alone can be the justification for switching providers. While digital asset management (DAM) has continued to be a standalone category, many of the new content management use cases involve significant amounts of rich media. Vendors in this report, such as Alfresco, Box, and Nuxeo, can manage all forms of content, including video and images.

**Prediction:** *By YE 2023, 60% of ECP providers will support the storage, management, and analysis of video content (70% probability).*

## Digitizing Content Processes

The value of content to the enterprise has to do with the speed of processing documents. Whether it is forms for capture, which can be done using a chatbot, or speeding up customer onboarding, or claims processing that deals with images and pictures, the value of ECP offerings today needs to be tied to the impact that these solutions can have on the business.

This is a shift in the market that will happen gradually, and many enterprises may not realize that their content management provider is actually slowing them down.

## Hybrid Cloud Comes to Content Management

The vast majority of enterprise content today is stored on-premise. Enterprises have been reluctant to go to the cloud, but now they are realizing that they can do so without losing security and privacy. However, for every firm that goes cloud, there are many that aren't quite ready. This is the reason that hybrid cloud is becoming a much stronger option versus going completely SaaS cloud.

For many enterprises, the strategy that seems to be working is to add a cloud content service that can connect to the existing repositories via content federation. This allows an enterprise to add new, innovative providers and get production going while they decide what to do with existing legacy repositories. In some cases, using a managed cloud service on-premise may be the best option for some of these enterprises.

Kubernetes has quickly become one of the key hybrid cloud options that vendors are using to implement their content management service into containers that run in the customer data center. Enterprises should look to evaluate the roadmaps of providers for their hybrid service offerings for ECP.

## **Multi-Cloud Gives Enterprises Choice**

With so many different regulations that are tied to data residency in many countries, the ability of the vendor community to be flexible has increased.

The cloud focus has changed to multi-cloud. Enterprises often still keep mission-critical content processes in a private cloud, but the focus is now on containerization. While public cloud is an option, multi-cloud gives enterprises data center choices. Choosing between types of cloud is a deployment choice, and there are more options today to meet the needs of global enterprises. That said, the need for innovation may impact the cloud decision, as features are being rolled out faster with content SaaS offerings than by traditional on-premise offerings.

Over the last several years, shifts in content types and the need to expedite enterprise evolution towards becoming fully digital have created changes in the requirements for managing content. While once subtle, these shifts have become far more noticeable today.

## **Enterprise Content Platforms—Automation, Intelligence, and Experience**

One of the reasons that content has become so popular in the enterprise is because paper is easy to automate without having IT involved. Many providers have enabled much more of a low-code automation approach, which is allowing teams to redesign their content processes faster than ever before.

Intelligent capture, intelligent extraction, and intelligent processing of data in documents is really what content intelligence is all about. Making the user experience more seamless and more user-friendly goes without saying, and many providers have redesigned their user interface to do just that.

Content automation remains the biggest opportunity in the market, and in many cases, current providers and best-of-breed workflow and content automation (WCA) providers are used together to develop new turnkey solutions, such as for claims management or customer onboarding.

Customer-facing documents should be the priority, and Aragon feels that many ECP providers should add e-signature capabilities to their platforms to allow them to do end-to-end transactions.

## **The Current State of Content Analytics in Enterprise Content**

Content analytics refers to the use of analytics to derive insights from content where the text or a higher-level abstraction of meaning—called a concept—has been organized in a model that can be mechanically processed. Content analytics generally includes

simple text analytics but provides more value. This is because content analytics can help with predictions and analysis based on these higher-level concepts (see Figure 2).

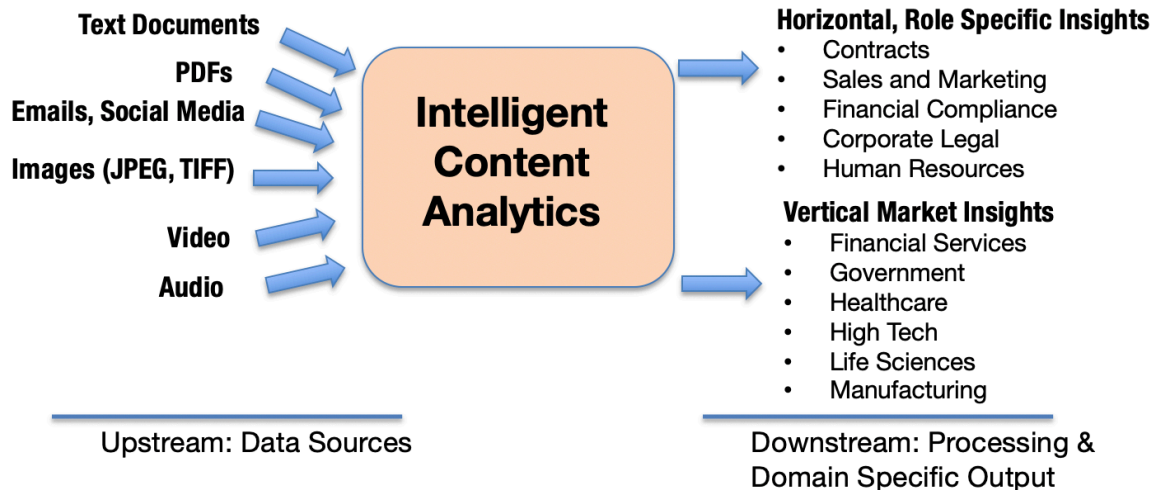


Figure 2: Intelligent content analytics will be a game changer for enterprises.

The market for content AI—text, image, voice, and video—is fractured and each is developing independently. Aragon feels that text and image analytics are intertwined, but today the algorithms that have been developed exist separately for each content type. There are similarities in image and video analytics due to the need to recognize objects. Today most providers are partnering for their artificial intelligence capabilities.

### Image Analytics Goes Mainstream

With the advance of image analytics algorithms, the content management market is undergoing change. This means that enterprises will be able to process very large volumes of images today, and videos tomorrow, to help them understand what is actually inside of an image or a scene.

This level of intelligence is a game changer for the enterprise. By understanding and being able to process images on the fly, image analytics saves hours and hours of human intervention, and it can open new areas of revenue for the enterprise. For example, being able to tell if an image is real or fake can help to either approve or deny an insurance claim. Being able to verify someone's identity using a picture can also speed-up customer onboarding.

We are still in the early innings of understanding all that is inside of an image. Today we have general pattern recognition, but over time image analytics will go much further and be able to scan similar images for small differences that humans might not detect. As image analytics



keeps getting better, more use cases in healthcare, security, and other sectors will come online.

### Digital Applications Powered by Content Platforms

In 2016, Aragon Research defined a critical architecture called digital business platforms. While many enterprise applications focus on data, there are just as many that are content-based, and the providers in this report are well-positioned to help automate content-centric processes. Today, automation and intelligence are the new critical areas of focus.

By leveraging APIs and simple interface approaches, such as mobile apps, enterprises can automate a content-based process faster than many thought possible. Digital transaction management, which helps to automate the process of approving and signing contracts, is an example of how content processes can be sped up.

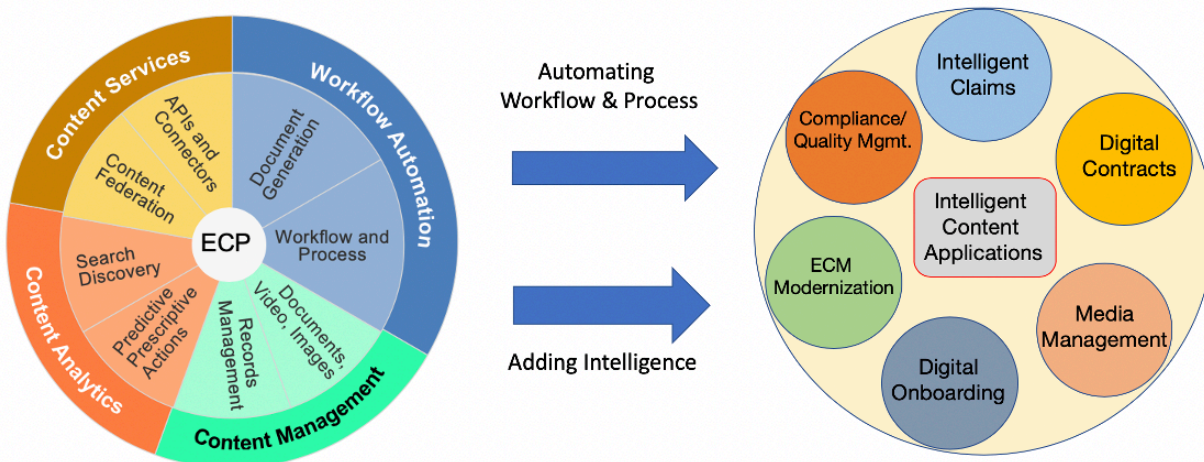


Figure 3: The Aragon Research enterprise content platform architecture and the growing application use cases.

### Content Applications and Low-Code

Enterprises need to look at simplifying their content processes. In many cases, these processes can be turned into an application—what Aragon refers to as content-enabled business applications. More business users are feeling the pressure to automate and revamp their document processes, and often, the simplest way to do that is by leveraging a mobile front-end.

Often, enterprises want to do a complete digital transformation and re-platform, but with legacy content repositories, it becomes difficult and time-consuming. A mobile application can be a great way to simplify the customer journey. Many enterprises today have overlooked mobile apps as a simple way to go digital.



## **Workflow and Content Automation Goes Mainstream**

WCA has evolved from basic document generation to become an automated content factory. The need to generate business documents isn't going away, and conducting business in a more automated and seamless fashion means that automating content and the associated content processes is a must to maintain a competitive advantage. Many enterprises that started with basic document generation with either a batch or real-time approach now need to look further at the content lifecycle and identify ways to automate the entire process. All of the current tools need to be looked at, as well as the amount of time people spend manually tweaking documents.

Aragon believes that WCA is poised to be a key catalyst for document automation, which, in terms of digital transaction management and digital business, represents a critical component of a digital continuum. WCA will consolidate the following:

- Forms software
- Workflow software
- Document generation or customer communications management (CCM)

## **Automating Content-Centric Customer Journeys**

Aragon feels that we are leaving the content management area, which has been a significant focus over the last twenty-five years. In many cases, the focus on content management was a result of the reliance on paper agreements, which had to be imaged and stored.

The reality is that paper processes are slowing down the enterprise and making the business less competitive. While senior executives understand this, sometimes it is only after an incident, like losing a major customer, that firms react. CEOs and chief digital officers (CDOs) are the change agents for their organizations—the challenge is prioritizing the automation of paper-based processes to eliminate manual steps and the time involved with those steps.

Conducting a customer journey mapping (CJM) exercise can reveal where the analog processes are slowing down a transaction. By reviewing the journeys of both customers and employee-based document processes, a set of goals can be established to make the journey digital and then later, to make it fully automated.

## Security Cannot Be Ignored

As enterprises face cybersecurity challenges, it is a given that content security has become an imperative. The content management market has led the charge toward increased security, and overall, vendors in this market are significantly ahead when it comes to core security when compared to other markets such as collaboration.

That said, document-centric security cannot be overlooked. Some providers, such as Box and Microsoft, have increased their focus on security over the last year.

## Aragon Research Globe Overview

The Aragon Research Globe graphically represents our analysis of a specific market and its component vendors. We provide a rigorous analysis of each vendor using three dimensions that enable comparative evaluation of the participants in a given market.

The Aragon Research Globe looks beyond size and market share, which often dominate this type of analysis, and instead uses those as comparative factors in evaluating providers' product-oriented capabilities. Positioning in the Aragon Research Globe will reflect how complete a provider's future strategy is, relative to their performance in fulfilling that strategy in the market.

A further differentiating factor is the global market reach of each vendor. This allows all vendors with similar strategy and performance to be compared regardless of their size and market share. It will improve recognition of providers with a comprehensive strategy and strong performance but limited or targeted global penetration, which will be compared more directly to others with similar perspectives.

## Dimensions of Analysis

The following parameters are tracked in this analysis:

**Strategy** reflects the degree to which a vendor has the market understanding and strategic intent that are at the forefront of

### Note 1: Key Content Security Requirements

Below is a set of content security features that need to be evaluated.

- Encryption
- Encryption key management (optional)
- Digital identity verification (mainly via multi-factor)
- Remote and/or offline viewing
- Recall
- Watermarking
- Content wiping (selective or full)
- Content retention policies
- Audit trails of content sharing and access

market direction. That includes providing the capabilities that customers want in the current offering and recognizing where the market is headed. The strategy evaluation includes:

- Product
- Product strategy
- Market understanding and how well product roadmaps reflect that understanding
- Marketing
- Management team, including time in the job and understanding of the market

**Performance** represents a vendor's effectiveness in executing its defined strategy. This includes selling and supporting the defined product offering or service. The performance evaluation includes:

- **Awareness:** Market awareness of the firm and its product
- **Customer experience:** Feedback on the product, installs, upgrades, and overall satisfaction
- **Viability:** Financial viability of the provider as measured by financial statements
- **Pricing and Packaging:** Is the offering priced and packaged competitively?
- **Product:** The mix of features tied to the frequency and quality of releases and updates
- **R&D:** Investment in research and development as evidenced by overall architecture

**Reach** is a measure of the global capability that a vendor can deliver. Reach can have one of three values: *national*, *international*, or *global*. Being able to offer products and services in one of the following three regions is the third dimension of the Globe analysis:

- **Americas** (North America and Latin America)
- **EMEA** (Europe, Middle East, and Africa)
- **APAC** (Asia Pacific: including but not limited to Australia, China, India, Japan, Korea, Russia, Singapore, etc.)

The market reach evaluation includes:

- Sales and support offices worldwide
- Time zone and location of support centers
- Support for languages
- References in respective hemispheres
- Data center locations

## The Four Corners of the Globe

The Aragon Research Globe is segmented into four sectors, representing high and low on both the strategy and performance dimensions. When the analysis is complete, each vendor will be in one of four groups: *leaders*, *contenders*, *innovators*, or *specialists*. We define these as follows:

- **Leaders** have comprehensive strategies that align with industry direction and market demand and perform effectively against those strategies.
- **Contenders** have strong performance, but with more limited or less complete strategies. Their performance positions them well to challenge for leadership by expanding their strategic focus.
- **Innovators** have strong strategic understanding and objectives but have yet to perform effectively across all elements of their strategy.
- **Specialists** fulfill their strategy well but have a narrower or more targeted emphasis with regard to overall industry and user expectations. Specialists may excel in a certain market or vertical application.

## Inclusion Criteria

The inclusion criteria for this Aragon Research Globe are:

- *Revenue*: A minimum of \$4 million in primary revenue for enterprise content platform software, or \$8 million in a related market (ECM, cloud content management, portal, or collaboration).
- *Shipping product*: Product must be announced and available.
- *Customer references*: Vendor must produce a minimum of three customer references in each region that the vendor is a participant.

## Vendors Included:

- AODocs was added this year.

## Vendors Excluded:

- Xerox was removed, due to lack of market focus.

**The Aragon Research Globe™ for Enterprise Content Platforms, 2020**  
(As of May 14, 2020)

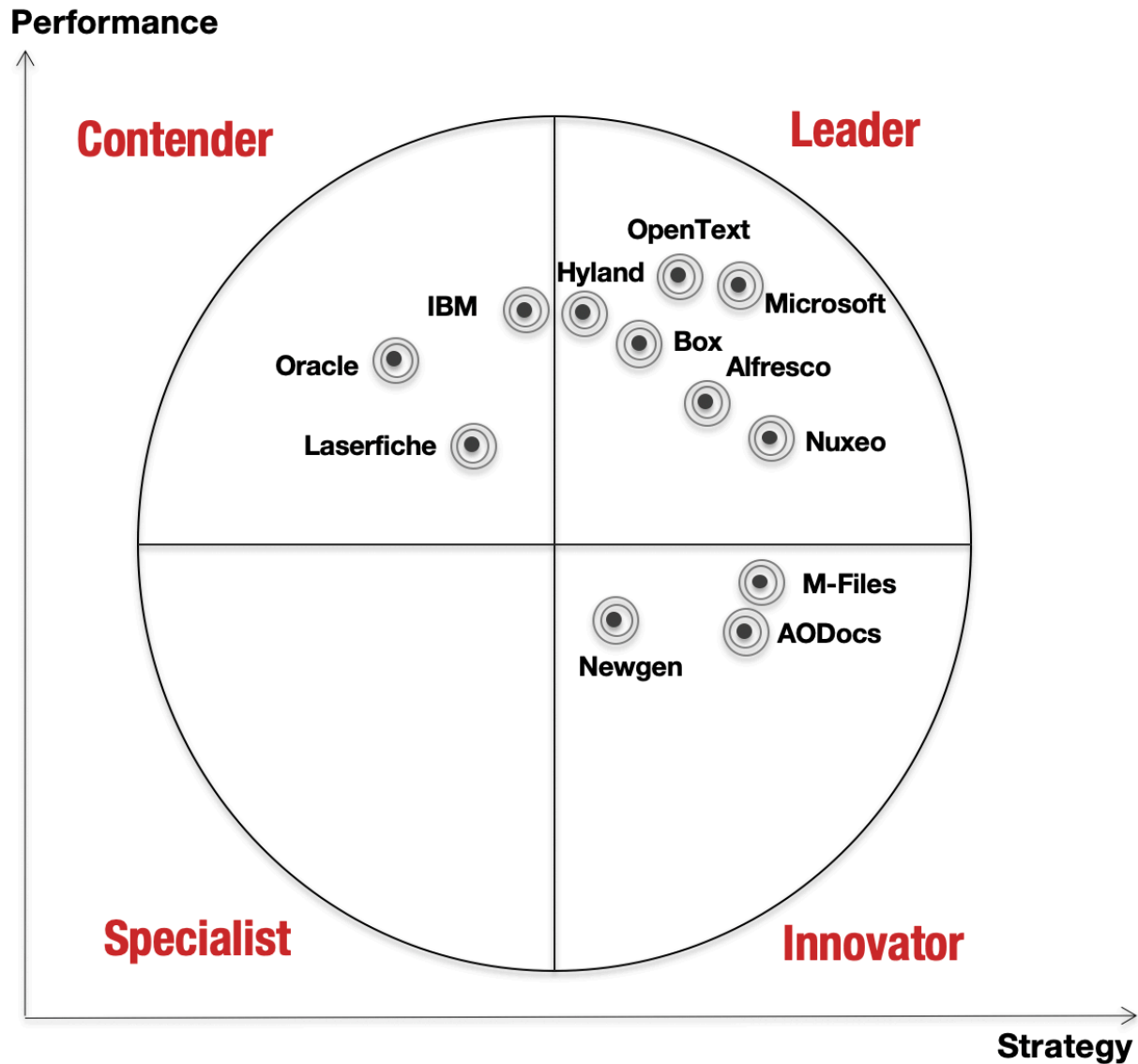


Figure 4: The Aragon Research Globe™ for Enterprise Content Platforms, 2020.

## Leaders

### **Alfresco**

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Alfresco is an open-source content services and solutions provider for information-rich enterprises with huge volumes of unstructured content. The company's core business revolves around the Alfresco Digital Business Platform (DBP). The Alfresco DBP is a modern, enterprise-class, cloud-native platform that enables organizations to collect, manage, govern, and enrich enterprise content for building robust content apps that create positive digital experiences. At the core of the Digital Business Platform is a robust content services engine with multiple value-added services providing critical capabilities—security, federation, governance, artificial intelligence, search, analytics, integration, and process management.

To strengthen its offerings, Alfresco announced two acquisitions and several new products over the past nine months, including: Alfresco Cloud (platform as a service); Alfresco Federation Services, a service that enables users to search and govern information across more than 60 different repositories and provides the ability to manage information in its current locations ('manage in place'); and Alfresco Enterprise Viewer, which enables users to view, annotate, and redact content (documents, images, audio, and video). In October 2019, Alfresco acquired pernxas, a provider of connectors for seamlessly integrating the Alfresco DBP with SAP NetWeaver®, SAP S/4 HANA®, and SAP Fiori®. In March 2020, Alfresco acquired Technology Services Group (TSG), a company that offers services and solutions, including ECM migrations and no-code interfaces for insurance, life sciences, and manufacturing enterprises.

Alfresco has continued to partner with Amazon and offers most of its services via the Amazon cloud. The company has also extended its cloud partnerships with Azure and Google. Alfresco's DBP has grown in popularity and is fully mobile-enabled. It enables enterprises to manage their legacy, mission-critical content, while simultaneously serving the needs of a growing mobile workforce. This positions it well in the area of digital business, where transformation initiatives are taking center stage.

#### Strengths

- Records management and compliance
- Federation services, including manage in place
- Mobile support for ECP capabilities
- BPM capabilities
- On-premise, cloud, and hybrid offerings
- Open-source
- Strong partner and GSI network

#### Challenges

- Balancing open-source and enterprise offerings



## **Box**

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Box, which is based in Redwood City, California, enhanced its offering over the last year to add a significant set of capabilities around content security. In Q3 2019, Box introduced Box Shield, which adds classification-based policies and intelligent threat detection. Box has also made significant enhancements to its workflow product, Box Relay, which makes it easier to add workflow to Box solutions. Box Skills leverages algorithms from partners such as IBM, Google, and Microsoft. The focus on content analytics will help Box deliver more robust content solutions where content intelligence is vital.

The Box platform has a robust set of APIs that enable it to integrate with a number of third-party applications to automate content processes. Because of demand for Box APIs, Box has introduced new configurations for high-volume API-users. The Box platform is also video- and image-friendly, which has allowed it to win a number of new deals. Box continues to have success in regulated markets, such as life sciences, where being 21CFR11 compliant is key.

### **Strengths**

- Brand recognition
- Native video support
- Native content security
- Secure collaboration across the extended enterprise
- 1,400+ integrations with major LOB and productivity apps
- Cloud focus
- Industry focus
- APIs
- Install base

### **Challenges**

- On-premise storage options

## Hyland

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Hyland, based in Westlake, Ohio, has continued to innovate on its core ECP offerings and capabilities to provide customers with the most feature-rich, secure, and innovative products. This includes OnBase and its complete content services portfolio, which supports industries such as healthcare, government, higher education, financial services, and insurance. As part of the latest version of OnBase, Hyland released a few notable developments. A new accounts payable (AP) solution offering gives AP users greater visibility, control, and efficiency to manage the procure-to-pay lifecycle. Additionally, compliance enhancements were made to its Governance Rules as a Service (GRaaS) solution, and more integration options were made available across its product suite.

In February 2020, Hyland acquired Learning Machine (now named Hyland Credentials), a complete system to issue digital credentials in a blockchain-secured format. Early to market, its current customers are primarily in the higher education space to credential documents such as transcripts and diplomas. Hyland plans to expand Hyland Credentials into other industries, including healthcare.

Additional Hyland products include its Connected Content for Healthcare offerings: Acuo, a vendor neutral archive; NilRead, for advanced visualization; PACSgear, for enterprise imaging capture; and ImageNext, its enterprise imaging workflow optimizer. It also offers Brainware, its intelligent capture platform, which includes some built-in AI-based content analytics. Brainware adds industry-leading classification and extraction technologies to Hyland's already mature and capable multi-channel capture platform. Overall, Hyland has become one of the de facto go-to solutions for imaging in the healthcare industry.

### Strengths

- Brand recognition
- Healthcare focus
- Back office
- Accounts payable
- Capture
- Case management
- Global partner channel

### Challenges

- Balancing multiple product SKUs

## **Microsoft**

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Microsoft continues to invest in its flagship content management platform SharePoint, which is part of both Microsoft 365 and Office 365. In 2019, SharePoint became more integrated with Microsoft Teams, which is Microsoft's team collaboration platform that is gaining significant traction in the enterprise. It is now easy to add SharePoint lists and pages as tabs in Teams. Microsoft has continued to enhance the SharePoint mobile app, which supports both iOS and Android. While SharePoint is the brand many people know, Microsoft has made content the focus across its portfolio, including Teams and OneDrive, as well as SharePoint overall. SharePoint continues to have one of the broadest partner ecosystems, which is one of the reasons for its continued success.

On the AI front, Microsoft has launched a private preview of Project Cortex that offers significant potential to enterprises when it comes to organizing content that is being discussed amongst project teams. Additionally, Microsoft has taken its workflow product, Power Automate (formerly known as Flow), and made it part of the Microsoft Power Platform, which is the automation and process offering that integrates with SharePoint. With Power Platform and SharePoint, Microsoft has a compelling architecture for both existing and new customers. Its focus on low-code means it is shifting its marketing focus from just IT to both IT and business users. Microsoft now has many ways that it can offer its content services to users via a variety of the products it markets. Its large partner network continues to design new solutions that include SharePoint and the emerging Power Platform.

### **Strengths**

- SharePoint install base
- Brand recognition
- Office 365 momentum
- Intelligence delivered by Microsoft Graph
- Partner ecosystem

### **Challenges**

- External video support

## **Nuxeo**

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Nuxeo has continued to grow organically due to its focus on industry solutions and enhancements to its core offering, including a significant investment in AI. The Nuxeo Content Services Platform uses a low-code approach that has proven to help enterprises go live in shorter timeframes. In 2019, Nuxeo also added connectors for Adobe Creative Cloud, Sitecore, and Aspera.

In 2019, Nuxeo launched Nuxeo Insight, which leverages a number of public cloud AI services from Amazon, Google, and others, as well as custom machine learning models that can be trained on customers' business-specific content and data, which gives customers significant advantages over their competition. Nuxeo has been pushing the envelope in content analytics and image analysis, including claims and use cases for fashion and apparel, where context is critical.

Nuxeo is winning deals due to its support for rich media (DAM assets) in addition to traditional documents, overall enterprise scalability, and flexible metadata modeling. Nuxeo's growth has been driven by its strong content federation, and its focus on AI and on modernizing content applications for enterprises.

### **Strengths**

- Open-source
- Overall ECM scalability
- DAM and video support
- Solutions focus
- AI insight capabilities
- Growing partner network

### **Challenges**

- Market awareness

## **OpenText**

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OpenText, led by CEO Mark Barrenechea, has continued to serve its customers with the large number of content management brands it has acquired over the years. In addition, OpenText has added a number of new senior executives to its staff, including Lou Blatt. OpenText positions itself as the information company, and while its core focus is enterprise content, it continues to buy additional companies, such as its March 2020 acquisition of XMedius for \$75 million. Another major acquisition that OpenText made was the December 2019 acquisition of Carbonite, which provides cloud-based backup, disaster recovery, and security to SMB customers.

OpenText has been investing in cloud, and it offers a growing portfolio of “Core” branded applications and services as part of the OpenText OT2, its new information management as a service platform. Applications it offers include Core Share (sharing content) with Core Signature as an e-signature add-on, Core Capture, Core Capture for SAP, and more. There is also a range of services, including Core Signature Service and Core Capture Services. At its core, besides acquisitions, OpenText has the largest portfolio of content management offerings in the industry, including OpenText Content Suite, Extended ECM, Documentum, and several customer experience assets, including Exstream and Media Management, which it positions as part of its Digital Experience product portfolio. The total number of brands is now over 32, and due to the growth of its brands, it now has a senior executive to manage its brand portfolio. Enterprises can now select between the Core OT2 cloud offerings as well as all of the other enterprise content platforms that OpenText needs to maintain.

### **Strengths**

- Brand recognition
- Install base
- Workflow and integration with business applications
- Content analytics
- Records management and compliance

### **Challenges**

- Reconciling number of product offerings

## Contenders

### **IBM**

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IBM, which announced a new CEO, Arvind Krishna, in April 2020, continues to shift to the cloud. As part of its focus on cloud, in 2019, it acquired Red Hat for \$34 billion. IBM continues to offer its portfolio of enterprise content offerings, including IBM FileNet, IBM Content Foundation, IBM Datacap, IBM Content Classification, and IBM Enterprise Records. Historically, one of IBM's strengths is its ability to manage content across different repositories. IBM has a number of industry solutions for ECM that complement its large install base. IBM now offers a full multi-cloud capability for its ECM platform, including an on-premise private cloud via its managed Kubernetes service.

IBM continues to invest in AI, with Watson Explorer as its flagship content analytics offering. Watson Explorer supports documents, voice, and video. Current use cases include sales, case management, customer service, and support. IBM continues to offer a strong records management feature set, which is important in compliance-related enterprises.

#### Strengths

- Extensive security options
- Content analytics
- AI expertise
- Support for on-premise and cloud
- Install base

#### Challenges

- Balancing multiple content management offerings



## **Laserfiche**

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Laserfiche continues to offer its ECP platform where it excels in imaging, document capture, and process automation solutions. In 2020, Laserfiche announced its new Workflow Bots, which is a robotic process automation platform that can automate data entry for repeatable processes. Workflow Bots should help Laserfiche expand its use cases in both existing and new accounts.

Besides its core document management and image and capture management offerings, Laserfiche also offers electronic forms and records management, which is DOD 5015.2 certified. Laserfiche has a number of reseller partners, including Ricoh, ImageNet, ThinkDox, Gestech, and others. Laserfiche supports both on-premise and cloud deployment options for government, education, healthcare, manufacturing, and financial services.

### **Strengths**

- Content management
- Electronic forms
- Growing mobile capabilities
- Rich content support
- Vertical solutions focus
- Local government install base

### **Challenges**

- Focus on reporting vs. analytics

## **Oracle**

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Oracle has made major inroads on its march to the cloud, and it continues to offer its Oracle Content & Experience (OC&E) for customer experience, WebCenter Content, which is its flagship ECP offering, Oracle WebCenter Imaging, WebCenter Capture, and WebCenter Forms Recognition. WebCenter Content has cloud and on-premise deployment options. Oracle is helping enterprises go mobile with its OC&E offerings, which are supporting firms in multiple industries. Key use cases include accounts payable and life sciences.

Oracle Content & Experience includes document management, digital asset management, records management, and imaging. Oracle's shift to the cloud has enabled it to offer an omnichannel and customer experience focus that can also leverage its own content analytics capabilities. Oracle Records Management can offer federated RM, and it supports managing RM policies across Microsoft SharePoint 2010, EMC Documentum, and IBM FileNet.

### **Strengths**

- ECM capabilities
- Mobile support
- Records management
- DAM and video support
- On-premise or cloud offerings

### **Challenges**

- Balancing the breadth of the Oracle portfolio

## Innovators

### AODocs

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AODocs, based in Atlanta, offers an ECP that was originally focused on Google Drive. Today, AODocs is one of the go-to options for enterprises that have Google Drive and need full ECP features, including records management, but it is increasingly also being deployed into organizations using Microsoft technologies. AODocs has expanded its capabilities as a native cloud SaaS offering that can now compete with and replace legacy enterprise content providers.

AODocs can deal with compliance regulations such as 21 CFR Part 11 and ISO 9001. Part of the growth of AODocs has been its focus on multiple industries, including life sciences, government, healthcare, manufacturing, and retail. AODocs also has a growing partner network, which, besides Google, includes Tata Consultancy Services, Accenture, DocuSign, PSIGEN Software, and Salesforce.

#### Strengths

- Cloud offering
- Growing set of integrations
- Google G Drive support
- 21 CFR Part 11 support
- Industry solution expertise

#### Challenges

- Market awareness

## **M-Files**

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M-Files continues to offer its intelligent information platform on a global basis. 2019 saw a number of new and improved packaged integrations, including Google G Suite, Salesforce, and Microsoft 365, which included Outlook, Teams, SharePoint, and Dynamics. In 2019, it launched M-Files Discovery and enhancements to its Smart Classifier machine learning capability. M-Files Discovery can identify, categorize, and help manage PII that is often contained inside of documents.

In 2019, M-Files also launched its back-office solution for small- and medium-sized businesses. The back-office solution supports use cases such as accounts payable, contracts, projects, and customer relationships. M-Files also announced a partnership with DocuSign to enable faster signing of electronic documents.

### **Strengths**

- Hybrid ECM
- Integration of content and data
- AI-based content analytics
- Configurability
- Use cases
- Mobile support

### **Challenges**

- Balancing user requirements in multiple markets

## **Newgen**

Newgen offers OmniDocs ECM suite, iBPS BPM suite, and OmniOMS CCM suite. Newgen has always been strong in the banking and financial services space, with a library of applications such as account opening solutions. Newgen announced an enhanced document scanning solution, OmniScan 5.0, in March 2020. In content analytics, Newgen provides its Document Classifier, which automatically classifies documents based on both document structure (image analysis) and content (text analysis).

The Newgen loan origination software solution was recently launched as part of the SBA paycheck protection program (PPP). This application speeds up the process of applying for and getting approved for an SBA PPP loan. Its solutions can be deployed on Amazon AWS and Microsoft Azure, as well as other public and private cloud environments, giving it cloud options for enterprises. OmniDocs also includes records management that is DOD 5015.2 certified.

### **Strengths**

- Content management
- Mobile app support
- CCM/doc generation
- BPM
- Strength in financial services

### **Challenges**

- Market awareness

**Aragon Advisory**

- Enterprises should look to consolidate their multiple enterprise content management offerings down to fewer than three offerings.
- Intelligent content analytics can be a game changer. Enterprises should evaluate current providers for their AI capabilities and look to change providers if the focus on AI is not there.
- Enterprises should target high-volume and high-value content processes for a content automation refresh.
- Enterprises need to evaluate the specific needs of the enterprise, as capabilities will vary for newer digital advancements, such as content analytics and video and image management.

**Bottom Line**

The need for content intelligence and content automation is putting pressure on existing ECP providers. Modernizing content processes is one of the fastest ways to speed-up the overall business. At the same time, reducing the number of providers should be looked at as both a goal and part of a modernization effort. Finally, security may be one of the additional reasons to retire some legacy providers.