

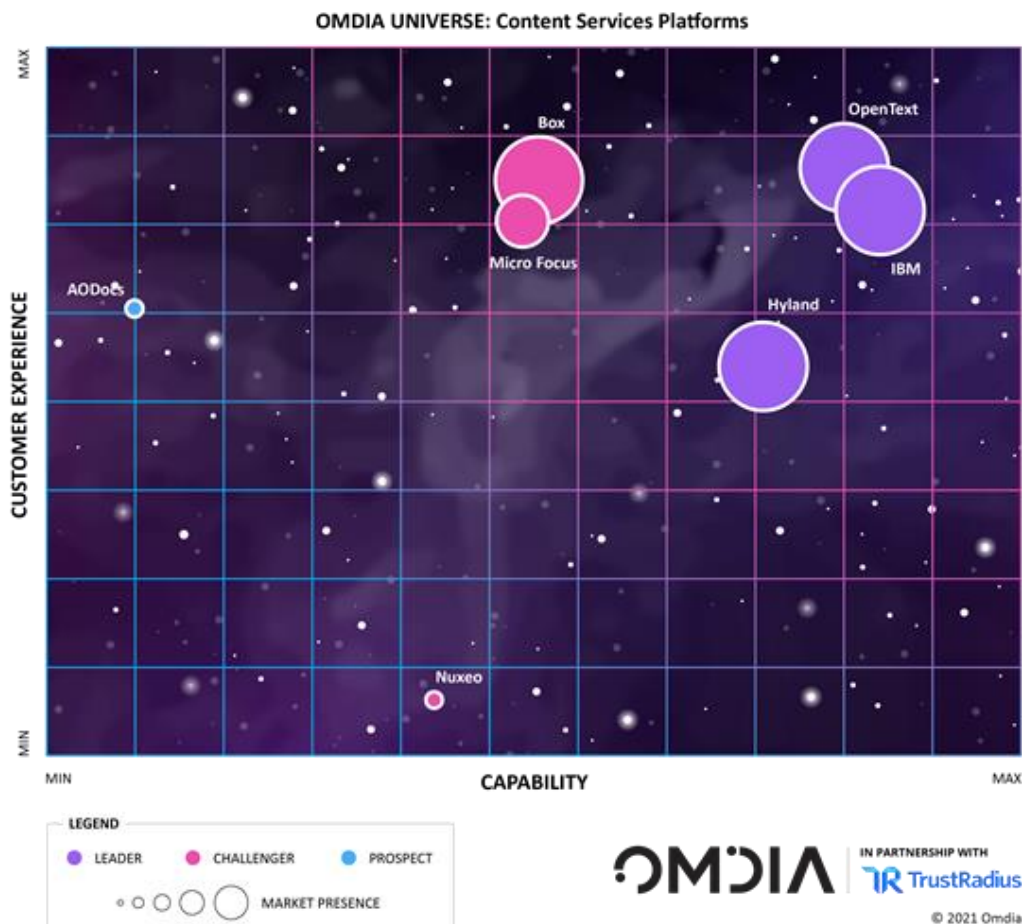
Selecting a Content Services Platform Solution, 2021

Summary

Catalyst

Any enterprise still using legacy enterprise content management (ECM) systems should consider migrating to modern, cloud-native content services platforms, which support Agile development, deployment flexibility between cloud and on-premises models, and enhanced security to help protect content. This report compares the solutions from leading content services platform vendors and will help decision-makers to draw up a shortlist of products to consider.

Figure 1: The Omdia Universe for Content Services Platforms Solutions, 2021–22



Source: Omdia

Omdia view

The most significant impact of the COVID-19 pandemic on enterprises has been the widescale move from office-based to home working, which has necessitated large-scale changes in how they manage both their workforces and the content they work with. Enterprises still using legacy systems may have managed to survive the pandemic thus far, but they are putting their future success at risk by continuing to use systems that are not optimized for flexible deployment, or the ability to adapt and change to rapidly evolving circumstances, and are not capable of providing enhanced security features to manage large numbers of remote workers.

COVID-19 has demonstrated that enterprises that have already implemented the latest cloud-native content services platforms as part of their digital transformation initiative have been able to survive the pandemic more easily. The ability to adapt to rapidly changing circumstances by having Agile systems has been a key enabler for enterprises suddenly having to support large numbers of home workers. However, it is not too late to change, and the pandemic should be seen as a wake-up call. Even if legacy systems have been adapted to securely support large numbers of remote users, it should not be assumed that the software will continue to provide the level of support or the security measures required in the future. It is almost inevitable, with a much more mobile population, that there will be future pandemics, or other emergencies that necessitate new and different ways of working and accessing corporate content, and enterprises need to ensure that they are prepared.

COVID-19 has also created huge challenges for content services platform vendors, particularly around how they can best support their customers, especially if they are still using systems that are not optimized for this level of remote working. In addition to providing support for new content services platform implementations, vendors have also been enhancing the capabilities of their content services platforms and applications offerings. Content services software is evolving rapidly and new technological developments such as artificial intelligence (AI) and machine learning (ML) are being embedded throughout the platforms to provide additional insights into content. Vendors are also adding features to enhance content security in their platforms including extending the cloud options available. Most vendors offer managed services, but some also provide their own data center facilities, while others develop partnerships with the large cloud vendors which allow them to integrate many of the features such as enhanced analytics and AI facilities with their own content services platforms.

While vendors are putting a great deal of effort into supporting enterprises in these difficult times, one area that still needs additional effort is simplifying the implementation and deployment of their platforms. Although content services platforms in general are not as complex as legacy ECM platforms, many still require extensive professional services to help with implementation. The aim should be for the vast majority of enterprises to be able to implement the platform in a timely fashion without external resources, and most vendors still have a way to go to achieve this. One way in which vendors could help speed up implementation is by providing more pre-built applications out-of-the-box for common horizontal tasks, and if appropriate, for vertical industries.

Key messages

- The content services platform market is continuing to consolidate with the acquisition of open source vendor Alfresco by Hyland, and further acquisitions likely.
- Both OnBase (Hyland's flagship platform) and Alfresco Digital Business Platform (DBP) were assessed as part of the Hyland offering, as each platform is targeted at different enterprise types.
- More vendors have entered the content services platform space, including enterprise file sync and share vendor Box.
- The content management market is forecast to be worth \$27.1bn by 2023, according to Omdia's *Software Market Forecast: Information Management, 2018–23*, indicating that there is plenty of business for the content services platform vendors to play for.
- Hyland, IBM, and OpenText are Leaders because they provide extensive capabilities across all technology areas.
- Box, Micro Focus, and Nuxeo are all Challengers because, although they are strong across most technology categories, they all lack some features we would expect to see in a content services platform.
- AODocs is a Prospect because it has a specialized product, designed specifically to be used with Google Drive. However, this does not mean it is inferior, and its extensive features that include retention management will suit the requirements of many Google users.
- IBM and OpenText's platforms are still too complex in terms of implementation and deployment according to customers, and this is an area that the vendors need to work on. Greater cloud adoption should help, but more out-of-the-box capabilities would help enterprises get up and running quicker.
- Omdia's *ICT Enterprise Insights 2020/21* survey, found that more than 30% of respondents have either not commenced digital transformation, do not believe it is relevant to them, or are in the early stages, demonstrating that vendors have not been entirely successful in convincing enterprises of the need for content services platforms.

Analyzing the Content Services Platforms universe

How to use this report

The Omdia Universe report is not intended to advocate an individual vendor, but rather to guide and inform the selection process to ensure all relevant options are considered and evaluated in an efficient manner. The report findings gravitate towards the customer's perspective and likely requirements, characteristically those of a medium-large multinational enterprise (5,000+ employees). Typically, deployments are considered across the financial services, TMT (technology, media, and telecoms) and government sectors, on a global basis.

Market definition

In this assessment Omdia analysts have developed a series of features and functionality that would provide differentiation between the leading solutions in the content services platforms marketplace. The criteria groups identified are as follows:

- **Content Services Platform.** This category includes the content repository, document management and collaboration, workflow, integration, and search capabilities. Some platforms provide additional capabilities such as records management and analytics.
- **Document management and collaboration.** The ability to create and edit content in a collaborative environment; collaboration capabilities may include file sync and share.
- **Search.** The ability to locate content across the enterprise on local drives, desktops, and a wide range of repositories including those that are cloud-based.
- **Content analytics.** Tools that analyze how content is being used and who is using it, which is useful in assessing whether content has value to the organization.
- **Workflow and business process management (BPM).** The ability to create content-centric automated processes that are often triggered by the receipt of an item of content. These may range from simple approval processes to complex processes that involve interactions between multiple applications.
- **Content services.** The features that are included to enable content services such as development tools, common integration mechanisms, and pre-built horizontal and vertical industry

applications and components, as well as the content services applications themselves such as records management and capture.

- **AI and ML.** How AI and ML capabilities are embedded throughout the product in areas such as document management, content analytics, BPM, reporting, and search. Also, how enterprises are able to use the capabilities provided in the platform when building their own applications.
- **Development and integration.** The provision of low-code and no-code tools, components and widgets, and horizontal and vertical applications that are provided for developers to create applications that interact with content as well as the methods by which the content services platform can integrate with other applications, including the availability of prebuilt connectors to common third-party applications including analytics, enterprise resource planning (ERP), and other content services platforms.
- **Cloud.** The various options for cloud deployment including the cloud options available; which public clouds are supported; how the services are licensed and priced; the ease, cost, and speed of migrating content to the cloud; and cloud security.
- **Governance and security.** Features and functions included that help ensure that content is secure and managed appropriately.

Market dynamics

The content services platforms marketplace had remained relatively stable in terms of acquisitions and consolidation since 2017 when Micro Focus acquired the information management and governance portfolio of HPE. Then in October 2020, Hyland completed the acquisition of the open source vendor Alfresco, which has grown Hyland's market share in Europe, and provided it with access to the open source market. As this report was being published, the acquisition of Nuxeo by Hyland completed. It is too early to assess what long-term impact this will have on the Nuxeo platform, so for the present it remains a separate product and it is therefore relevant to assess it as such. There have certainly been fewer such acquisitions in this space over the past few years, but the area has grown as vendors from different technology areas have re-architected their platforms to suit a content services scenario. One area where acquisitions are growing is in complementary technologies, for example Hyland's acquisition of the RPA vendor Another Monday, and OpenText acquiring mid-market security vendors to enhance the capabilities of their portfolios. Omdia expects content service platform vendors to continue to invest in companies that can complement their platforms and provide additional capabilities. One area where acquisitions may be expected in the coming years is in AI/ML and analytics, which is a technology where some vendors are lacking advanced capabilities.

The content services platforms space is dominated by the large ECM vendors, which have turned to content services to offer cloud-native platforms that are less complex and easier to implement than the old megalithic ECM platforms. There are also traditional electronic document and records management (EDRM) vendors such as Objective and Fabasoft, which have a heritage of providing solutions for the government and public sector verticals and were among the first vendors to gain

records management certifications in the early 2000s. Finally, there are enterprise file sync and share (EFSS) vendors, most notably Box, which has expanded into the content services platform market.

Figure 2: Vendor rankings in the Content Services Platforms Universe

Vendor	Product(s) evaluated
Leaders	
Hyland	Alfresco Digital Business Platform v6x, OnBase Foundation EP4, Brainware Foundation EP1, Enterprise Search v6x, Hyland Experience Capture v1, Hyland Experience Platform v1, Hyland Content Composer EP1
IBM	IBM Cloud Pak for Automation 20.0.3, Digital Business Automation on Cloud – SaaS, IBM FileNet Content Manager 5.5.6, IBM Automation Document Processing 20.0.3, IBM Business Automation Insights 20.0.3, IBM Business Automation Workflow 20.0.0, IBM Datacap 9.1.8, IBM Automation Mobile Capture 3.4.0, IBM Content Navigator 3.0.9, IBM Enterprise Records 5.2.1, IBM Content Collector 4.0.1
OpenText	Documentum Platform 20.2, Documentum D2 20.2, Documentum xCP 20.2, Records Manager, Retention Policy Services, Trusted Content Services, Documentum Reports, Core for Federated Compliance, File Intelligence, Magellan, InfoArchive, Brava!, AppWorks, Intelligent Capture, and Extended ECM Documentum for SAP
Challengers	
Box	Box Drive, Box Relay, Box Shield, Box Governance, Box KeySafe
Micro Focus	Content Services Portfolio: Content Manager 10, File Analysis Suite 3.4, Structured Data Manager 7.6.5, File Reporter 4.0, File Dynamics v6.5, Control Point
Nuxeo	Nuxeo Platform (10.10), Nuxeo Cloud service, Nuxeo Insight service, Nuxeo Transformation service, Nuxeo Drive 4.5.0, Nuxeo Federation Framework, Nuxeo Enhanced Viewer 10.3, Nuxeo Salesforce Connector 10.14, Nuxeo Creative Cloud Connector 1.2.7, Nuxeo Sitecore Connector 1.0.1, Nuxeo Outlook Connector 1.0.1
Prospect	
AODocs	AODocs Content Services Platform (release 54)

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Source: Omdia

Market leaders

Hyland is a leader because both platforms that were assessed have a wide range of capabilities across all technology areas, with particular strengths in document management and collaboration, and AI and ML for Alfresco, and workflow and BPM, and the content services platform for Hyland. Both platforms have strong search capabilities. Extensibility is a focus as the vendor continues to enhance the developer experience through a variety of extensions to the Alfresco framework that allows the development of futureproofed, custom apps. Together, the two platforms provide extensive capabilities across the entire content services area, and Hyland's commitment to open standards and APIs enables enterprises to integrate and customize solutions to meet business needs—but the vendor needs to ensure that it addresses any weak areas in each platform using the capabilities of the other. Above all, it must not become distracted by any integration or remedial work required, but must continue to innovate to remain a leader.

IBM is a leader because it is strong across all technology areas, although it is strongest in document management and collaboration, search, and workflow and BPM. It has AI and ML embedded throughout its platform, which uses its Watson technology, and this is an area where IBM can provide real differentiation. Enterprises that want a single platform for document management, records management, governance, intelligent document capture and processing, and workflow management should consider the IBM proposition. The vendor needs to keep innovating (particularly in AI and automation) to maintain its leadership position.

OpenText is a leader because it has a wide range of capabilities in all technology areas and it benefits from Magellan, its AI and analytics solution, which adds capabilities throughout the Documentum platform. Its strongest areas are document management and collaboration, content analytics, and workflow and BPM. Documentum will appeal to enterprises in highly regulated industries, particularly in energy and engineering, and life sciences, where it offers vertical solutions. OpenText must continue to innovate and add extra capabilities to Documentum, particularly in the areas of AI and analytics but also in compliance and governance to help enterprises in highly regulated industries in order to maintain its position as a leader.

Market challengers

Box is a challenger because it provides a wide range of capabilities that helps enterprises to manage their content. It is particularly strong in the areas of content services platform, workflow and BPM, content services, and governance and security. It is an ideal solution for enterprises that require a cloud-based solution and need to share content internally and externally. Box is a relatively new entrant to the content services market, and the fact that it is already a challenger demonstrates its potential to become a leader, if it adds a few additional capabilities particularly in AI and ML, and continues to innovate.

Although Micro Focus is strong across most technology areas, it does lack capabilities in development and integration, where it does not offer pre-built vertical or horizontal applications, which would help enterprises get up and running quicker, making the company a Challenger. Its strongest areas are content analytics, document management and collaboration, and search. It benefits from its IDOL AI-powered search and analytics engine, with capabilities embedded throughout the platform. Its emphasis on governance and security make it an ideal solution for

enterprises in regulated industries. Further innovation in the platform using its AI/ML technology, plus adding a few pre-built applications for common tasks, should enable it to become a leader.

Nuxeo is a Challenger due to the fact that while it is strong in most areas—including governance and security, cloud capabilities, document management and collaboration, and workflow and BPM—it does have a few weaknesses including development and integration where it does not have as many pre-built applications and components as some of its competitors. It will appeal to enterprises in the vertical industries that it focuses on including banking, insurance, and healthcare that prefer an open source solution. Increasing the number of vertical applications and use cases it offers would help it to become a Leader.

Market Prospect

AODocs is a prospect because it is a specialized solution that offers capabilities that are designed for enterprises that have already deployed Google Drive. It leverages many of the features within Google Drive, but it also enhances many of these capabilities. It will therefore appeal to Google-centric enterprises that have already deployed Google Drive. In order to become a market Challenger, AODocs needs to increase the capabilities it offers and also deliver on its promise to extend its platform to Microsoft Office 365 to increase its potential customer base.

Non-participating vendors

Microsoft and Oracle were both invited to participate in this Omdia Universe but declined. However, they are regarded to be too important not to get a mention. Although Microsoft and Oracle were not assessed and do not appear in the Omdia Universe diagram, there is a short writeup of each vendor's offerings at the end of this report.

Market outlook

According to Omdia's *Software Market Forecast: Information Management, 2018–23*, the content management market is forecast to grow at a growth rate of 10.3% between 2018 and 2023. The market is set to be worth \$22.4bn by the end of 2021, growing to \$27.1bn by 2023, proving that there is plenty of market share available for content services platform vendors. However, the content management market is extremely mature, and while there are still plenty of enterprises that want to migrate from legacy ECM platforms to content services platforms at present, this will not continue indefinitely. There will come a point when the majority of enterprises that wish to will have implemented new cloud-native platforms. The architecture of these platforms whereby the platform and content repository are separated from the applications that access the content mean that enterprises no longer need to rip and replace the platform or undertake major upgrades every few years as their requirements evolve. Therefore, vendors need to find additional revenue streams to grow their content services businesses in the future. One way to do this is to expand their content services applications capabilities to provide many more pre-built applications and components making it much easier for enterprises to expand their content services implementations.

However, not all enterprises have started their digital transformation journey. Omdia's *ICT Enterprise Insights 2020-21* found that 13.4% of respondents have either not commenced digital transformation at all, or do not believe it is relevant to them when asked about their digital transformation progress in exploiting the value of data across the enterprise. A further 17.1% are in

the early stages. Only 15.6% believe they have completed the process. These are worrying statistics. Implementing a modern content services platform to better manage unstructured content, drive efficiencies, and increase agility should be seen as a starting point for a digital transformation initiative. These statistics should also be of concern to vendors as they demonstrate that they may find it difficult to persuade some customers to move from legacy ECM systems that they no longer support.

Cloud is also important to digital transformation. Legacy ECM systems do not always work well in a cloud environment, particularly if they were architected as on-premises systems. Most content services platforms have been rearchitected to be cloud-native, although many vendors are experiencing reluctance among customers to adopt public cloud solutions. At best most are finding that customers are either adopting private clouds, or a hybrid model. Omdia's *ICT Enterprise Insights 2020-21* survey backs this up. For storage management software, which includes document management and archiving, the current level of adoption in public cloud infrastructure as a service (IaaS) is 19.55%, and in public cloud platform as a service (PaaS) it is 15.54%. However, for software as a service (SaaS), it is only 8.65%. Legacy on-premises usage is still 14.49%. According to the survey, the figures for the next 18 months are similar to the current ones, suggesting that there will still be a significant number of enterprises using legacy on-premises systems, which indicates that there is still plenty of opportunities for content services platform vendors to persuade customers to adopt their cloud solutions.

Vendor analysis

Micro Focus (Omdia recommendation: Challenger)

Micro Focus should appear on your shortlist if you require a platform that focuses on end-to-end information management that is strong on governance and security

Micro Focus is a relatively new entrant to the content services market; however, its offering is not. In 2017, Micro Focus acquired the ECM portfolio of HPE, which comprises a number of very mature products including its AI-powered search and analytics engine, IDOL. The inclusion of IDOL provides a differentiator for Micro Focus in terms of AI and ML features, as its capabilities are way beyond those of many of its competitors. Micro Focus has taken a slightly different approach to other vendors in terms of content services platforms as its content management and collaboration capabilities are part of a larger information management and governance product group. This provides a number of important capabilities including unified endpoint management, information archiving, and data protection and backup as well as content management and collaboration. Together, these capabilities help provide the additional security measures required to support enterprises as they manage large numbers of home workers during the COVID-19 pandemic, in addition to providing many of the capabilities required to manage the entire lifecycle of content.

Figure 7: Omdia Universe ratings—Micro Focus



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Source: Omdia

Strengths

The strongest areas for Micro Focus are content analytics, document management and collaboration, and search. Unsurprisingly, Micro Focus provides extensive analytics capabilities, which are embedded with IDOL to provide valuable insights that are applied throughout the product set. Content analytics is embedded in the platform and is provided out-of-the-box in a number of deployment options including on-premises, in the cloud, or in a hybrid scenario. Its analytics capabilities provide insights into how content is being used at the document, record, or object level. Content can be classified by customer, conversation, project, or topic and it can be categorized according to the level of risk or privacy requirements. Auto classification is supported, which

includes conceptual visualization, data, and pattern recognition. Multiple techniques are available to identify concepts and context including keyword search, phrase search, conceptual search, natural language, example documents (to find similar documents, related categories, relevant users, or queries that would match), images, video segments, audio segments, user agents (explicit and implicit), and analysis of a set of documents. Speech-to-text analytics are supported, allowing audio to be analyzed, which is a differentiator over most of its competitors. Sentiment analysis, which assesses the degree to which the sentiment of a piece of text is positive, neutral, or negative, using both linguistic analysis and a statistical, pattern-based approach—is also provided.

Micro Focus offers extensive search capabilities, using built-in Micro Focus IDOL or Elasticsearch. It provides an enterprise federated search capability that can search across multiple indexed repositories as well as conducting web searches. It employs a number of techniques including phrase, proximity, and Boolean logic and is able to conduct full content and metadata searches. The Elasticsearch engine option offers features such as ranking results by relevance, shading of large search indexes, and AI for indexing the most used metadata fields first. Micro Focus's proprietary NLP Engine extracts sentiment, conversation, emotion, effort, intent, slot filling, and fact extraction. The conversational capabilities detect intent and classify utterances to inform the conversation. Search results can be viewed through Micro Focus UIs including the windows client, web client, desktop client, and Admin Console Client. In addition, a built-in content viewer is embedded within the tool of choice negating the need to have the native application present. If a user does not have the rights to view a document, it will not appear in the results set.

Micro Focus provides the tools and support for third-party integrations to manage the entire lifecycle of content through creation, management, retention, and archiving, to deletion, and legal holds. Content Manager provides out-of-the-box integrations to SharePoint on-premises and Office 365. External participants can be invited to collaborate with all actions tracked within the audit trail. Team collaboration is supported through the integration with SharePoint and Office 365, and packaged integrations are also provided to the partner developed collaboration solutions, such as iCognition RM Workspace, and Objective Perform. Team file sharing is supported with Micro Focus Filr, which allows users to share files stored on corporate networks securely, and content can be synced to a user's desktop for offline viewing and editing. Records management capabilities are also provided with user defined retention policies based on policies using triggers such as event dates. File plans, physical records, the transfer of physical records to warehouses, and transfer of records to a new custodian are all supported, as is the ability to move records between storage tiers as requirements change. Micro Focus is DOD 5015.2 standard certified including optional chapters, Victorian Electronic Strategy (VERS) compliant, and meets or exceeds ISO 15489, ISO 16175, and CFR 21 part 11. Lifecycle policy retention can be extended to external content stores in SharePoint, Documentum, or FileNet with ControlPoint, which allows in-place records management. Support is provided for mobile devices with content encrypted on the device and in the cloud. For organizations that require additional remote device security, device controls, management, remote lock, and remote wipe capabilities, Micro Focus provides its Unified Endpoint Management solution, which manages all mobile devices, laptops, desktops, point of sale, kiosks, ATM, and IoT devices.

Limitations

Micro Focus's weakest areas are content services and development and integration. It does not offer pre-built customizable vertical or horizontal applications to help speed up implementation, but

rather supports its large ecosystem of system integrators and consultancies such as Deloitte, Accenture, Capgemini, DXC, Hewlett Packard Enterprise, Ingram Micro, PWC, WiPro, Infosys, and Tata Consultancy Services who specialize in providing customized solutions.

Micro Focus does not have a community or marketplace through which connectors can be sold or exchanged as some of its competitors do. However, some open source connectors are available on GitHub, and in addition, Micro Focus develops and adds a number of connectors to its portfolio each year.

Opportunities

With its wider portfolio, which includes security products, Micro Focus can benefit from the move to remote working caused by the COVID-19 pandemic as it is able to help enterprises to provide secure instant access to content from any location at any time, and marketed appropriately, this can provide an advantage. The requirement for transparent access to and insights from information is also helping Micro Focus as one of the strengths of its portfolio is its ability to provide insights from content thanks to the AI/ML capabilities of IDOL.

Cloud provides another opportunity for Micro Focus. It offers flexible deployment options including a managed service as well as allowing customers to work with their current managed services provider. The vendor intends to enhance its cloud offerings by increasing the breadth and depth of its cloud solutions across the Content Services portfolio to decrease costs and provide more storage options, as well as working with partners to further their hosted subscription services. These enhancements should increase the attractiveness of the Micro Focus proposition.

Threats

A major threat for Micro Focus derives from the vendor's limited tenure in the content management market, and the fact that many enterprises will not be aware of the fact that Micro Focus now has an extensive content services/content management portfolio. Micro Focus needs to ensure that its marketing initiatives highlight its capabilities in the content services space. In addition, many existing customers will be using legacy HPE (and earlier) solutions, and will not be aware that the latest versions of their systems are now owned by Micro Focus. The vendor needs to be much more vocal in highlighting the origins of its portfolio of products.

Micro Focus faces a threat from the large array of content services platform vendors, which include specialist vendors as well as large multiple product vendors. With its own professional services capability as well as its large ecosystem of partners, it is well positioned to help enterprises with their implementations. However, an increasing number of organizations want much simpler platforms that are quick to deploy and are supplied with a large number of pre-built applications and components. Micro Focus should consider providing applications for common tasks out-of-the-box that will enable enterprises to get up and running much quicker without the need for extensive services.

Methodology

Omdia Universe

The process of writing a Universe is time consuming:

- Omdia analysts perform an in-depth review of the market using Omdia's market forecasting data and Omdia's ICT Enterprise Insights survey data.
- Omdia creates a matrix of capabilities, attributes, and features that it considers to be important now and in the next 12–18 months for the market.
- Vendors are interviewed and provide in-depth briefings on their current solutions and future plans.
- Analysts supplement these briefings with other information obtained from industry events and user conferences.
- Analysts derive insights on the customer experience with each solution via reviews and ratings on TrustRadius.
- The Universe is peer reviewed by other Omdia analysts before being proofread by a team of dedicated editors.

Inclusion criteria

The criteria for inclusion of a vendor solution in the *Omdia Universe: Selecting a Content Services Platform Solution 2021–22* are as follows:

- The solution provides a platform for content services, where all of the core functionalities can be accessed and managed through a single interface.
- As a minimum the platform must include a content repository, document management and some collaboration tools, search, and integration capabilities.
- Each content services platform must be capable of being deployed in the cloud and preferably be cloud-native.
- The products have a significant level of recognition among enterprises, cover a range of verticals, and have a presence in multiple geographies.

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- The vendors must provide or include the ability to integrate with a wide range of content services.

Appendix

Further reading

Fundamentals of Content Services Platforms 2021, (January 2021)

Hyland helps enterprises to become more agile during COVID-19 pandemic, (January 2021)

Analyst Commentary: OpenText supports the resilient organization, (May 2020)

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