IDC MarketScape: Worldwide Content Management Systems for Authenticated Digital Workspaces 2021 Vendor Assessment
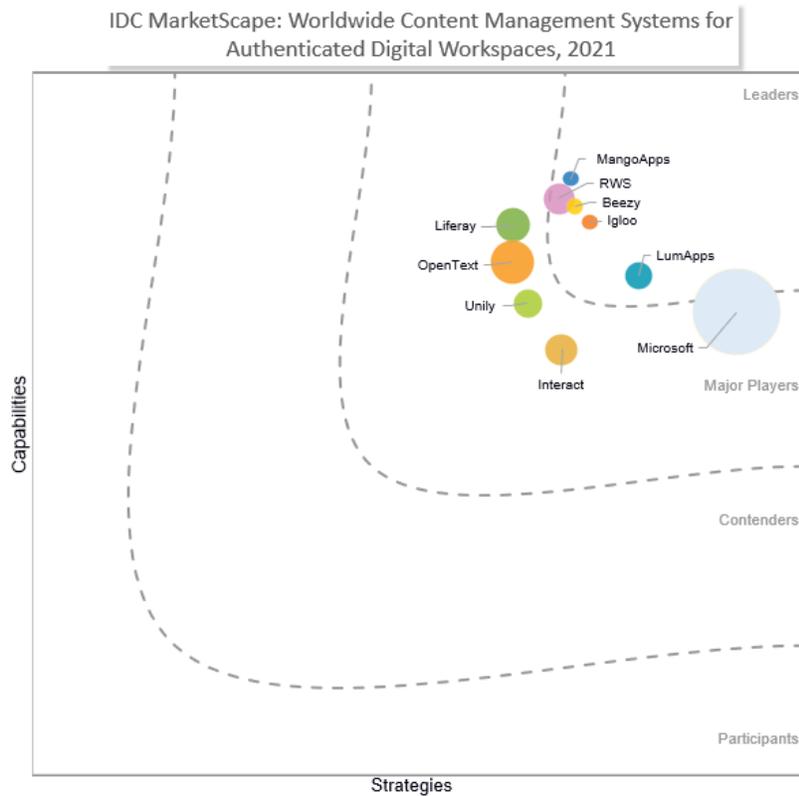
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THIS IDC MARKETSCAPE EXCERPT FEATURES RWS GROUP

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Content Management Systems for Authenticated Digital Workspaces Vendor Assessment

IDC MarketScape: Worldwide Content Management Systems for Authenticated Digital Workspaces, 2021

Source: IDC, 2021

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Content Management Systems for Authenticated Digital Workspaces 2021 Vendor Assessment (Doc # US47412921). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

As organizations define and put into practice their ideal workplace cultures, creating moments of delight and inspiration will signal the next phase of business priority. Face-to-face interactions will be additive communication channels instead of primary, which was the case for many organizations prior to the pandemic. Process automation, chatbots, and self-service digital channels will free up more time for cross-functional, large-scale collaboration. The benefits realized will be significant: new ideas, increased job satisfaction, and better knowledge management and customer or partner satisfaction in the areas that are most important to each business. The organizations that embrace a collaborative and transparent working culture that leverages the intelligent digital workplace as the center of the employee experience and connect it to the external user portal for authenticated digital experiences will be better positioned to accelerate transformation initiatives and improve efficiencies as we settle into hybrid working models.

The well-known enterprise portal and associated content management system (CMS) that has been the staple of employee intranets and customer portals (an authenticated digital workspace, which includes related variations – member sites, supplier extranet, partner communities, etc.) has since evolved to deliver a more modern experience on mobile, kiosk, and other connected devices. Content ownership has also expanded to include everyone in the organization, and modernization has followed close behind the external public website in adopting modular cloud-based and API-friendly architectures.

Under the hood of the employee intranet or customer portal is a CMS that manages the creation, edits, deletion and, most importantly, publishing of content (e.g., images, videos, forms, templates, pages, component, and product assets) to various endpoints. For many organizations, a basic set of CMS capabilities and a straightforward approach to publishing information to the digital workspace are all they need. For others, the ability to not only communicate with users but also surface work activities, collaboration tasks, social environments, and knowledge bases to a single, personalized user interface is the next step in delivering an exceptional authenticated digital experience.

Modern Digital Workplaces Require a Different Kind of CMS

There is a shift in employee empowerment at the office where it is important to create free-flowing, two-way communication between staff and executives. This carries over to the customer and partner portal environment where content can easily be shared and there can be an emphasis on transparency. The pandemic brought forth a velocity of distributed news, tasks, and interactions. Customers needed access to their accounts, students required online learning, and suppliers relied on the portal for inventory management. Each of these authenticated users interacted with the organization on desktop browsers and mobile devices. The traditional intranet/extranet was a top-down communication site or a place where corporate documents were pushed to the user. The modern digital workspace is an ecosystem of connected communications, business tasks, or activities.

Rather than forcing people to move off their favorite app, the modern digital workspace will connect to it. The goal is to have interactive, informative, conversational, and productive activities connect to a system of knowledge, social sites, communities, and collaboration team spaces. The modern digital workplace requires a high degree of interoperability with many different systems including news feeds, image repositories, group messaging, calendars, HR, ITSM, and financial systems.

IT's key role is to help business teams find the right balance of technology to deliver the experiences that will maximize the value realized by employees and customers. IDC has identified business outcomes key to achieving that balance:

- Predictable communications ensure that employees and customers can give and receive information in the right form, at the right time, and via the right channel, and communications are consistent across channels and touch points.

- Lifetime value is accrued through value exchanges across iterative customer journeys including services, information, evangelism, and other forms of value. If customers perceive imbalances, they will quickly become ex-customers. If employees perceive a loss of value, they too will leave.

- Mutual trust is a nonnegotiable "virtual contract" between employees, customers, and businesses that governs how companies use their data and serves as a foundation for the relationship.

Types of Content Management Systems

Each CMS category can be characterized by the level of control and technical skill needed at the content, design, and administration layers. Small to midsize businesses or independent departments wanting to outsource website operations will find that single-stack applications require little to no technical skills and provide simplicity in creating content and sites quickly. Large enterprises with heavy transactional activities or multiple data sources will find that a traditional WCM platform offers the broadest set of capabilities and a robust API framework. Finally, the most developer-intensive solution, headless CMSs, is a good fit for organizations that need a fully customized front-end delivery and have strong development skills in place.

Architectural Considerations

Modern CMSs orient toward a content powerhouse that offers codeless content creation (drag-and-drop authoring and administration, intelligent content recommendations, and roles/usage-based templates), presentation design freedom, automated decision-driven workflow, and scalable edge delivery. Architectural elements of consideration include:

- **Smart data structures:** Content relationships require a data structure that supports an object-level atomic design to prevent layered or circular content referencing. Every element needs to be independently assembled, allowing for reuse without dependency on the presentation and machine driven (e.g., automation, insight, and recommendations) to drive to kinetic outcomes (e.g., engagement, conversion, and learning).

- **Diverse content types:** The data layer must handle a diverse set of content formats (e.g., atomic fragments of content, text, images, videos, AR/VR, and audio).

- **Accessibility support:** Accessibility checkers quickly scan a website for on-page and technical accessibility issues and errors in readability or navigation based on recognized standards, such as the Web Content Accessibility Guidelines (WCAG). With better content enrichment and presentation design, accessible websites provide an inclusive experience for everyone,

optimized across devices (desktop browser, voice browser, mobile phone browser, and automobile displays) or operational constraints (noisy surroundings, limited lighting, and hands-free driving environments).

- **Microservices and API frameworks:** Offering a set of small services, each running in its own process and communicating with lightweight mechanisms, often an HTTP resource API, such as REST or GraphQL, microservices are built around business capabilities that can be scaled independently by distributing the services across servers and replicating as needed with explicit remote call mechanisms.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

The vendor inclusion list for this document was designed to accurately depict the vendors that are most representative of any given cloud-based content management system buyer's selection list. Vendors were then surveyed and further investigated to ensure that the offerings qualified with both capabilities and strategies related to the CMS market.

Critical to this research effort was for the vendor to meet the inclusion criteria. Any vendor participating in this IDC MarketScape had to showcase that it met the following:

- Market presence and momentum based on IDC inquiry and three years of positive revenue growth
- Generates revenue of $10 million in cloud-deployed annual recurring revenue (excluding professional services) in calendar year 2020 from a commercially supported business packaged offering
- Deployment in the cloud as managed hosted private cloud, PaaS, or SaaS in a public cloud
- Targets and scales to meet the needs of large to enterprise-sized organizations supporting 1,000+ employees with approximately 50% of customers in this range
- Has revenue attributed to multilanguage intranets or authenticated digital workspaces in at least two of the following regions: North America, Latin America, Europe, the Middle East and Africa, Japan, China, and Asia/Pacific
- Had customers in production in the cloud for at least 12 months as of January 1, 2021
- Provides capabilities to create and manage websites or authenticated workspaces with support for the following capabilities: content creation, design presentation, personalization, content library services, security/permissions, analytics/reporting, and interoperability to adjacent technologies
- Provides customer and partner references that have been in production for a minimum of one year and can assess the vendor on its support and product performance in usability, interoperability, customer service, strategy, and cloud provisioning

ADVICE FOR TECHNOLOGY BUYERS

Content management systems are evolving in terms of advance functionality and a shift to cloud-native, microservice architectures. As organizations refine their cloud strategy, buyers have a choice of CMS technology options that cater to the needs of the business – whether it is with a single-stack application or a developer-savvy open source system. The modern CMS is designed to get business users up and running quickly and effectively streamline the content processes to communicate to, collaborate with, and engage the remote workforce and external authenticated users more effectively.

For buyers with a cloud-first strategy, CMS applications should provide a solid return on investment that benefits from cloud elasticity and scaled performance that align with business goals. The vendor should provide the services and support to get you up and running quickly and continue to monitor your progress to success. Training and continuous education should be available as guided tutorials, hands-on training, and a community for self-help. The need to deliver more engaging digital experiences will demand more of the CMS systems in the coming years. IDC advises technology buyers to look for the following when selecting a vendor:

- A flexible architecture to support reusable atomic content, roles-based templates, and an authoring environment that makes it easy to create and publish content to multiple channels
- A cloud-native architecture, cloud-first strategy, and strong representation of customers that have deployed high-traffic content sites in the cloud
- Intuitive user interface for all users who interact with the CMS (e.g., HR, finance, marketing, sales, customer support, suppliers, and partners)
- A modern, API-first, microservices-based architecture to ensure performance and ease of integration
- An innovation strategy with support for artificial intelligence (AI)/ML, conversational interfaces, personalized content, knowledge management, or intelligent search
- Innovation track record and a demonstrated ability to deliver enhancements on a regular cadence in a seamless manner, including automatic and frequent updates
- Supported connectors to adjacent applications such as an ITSM, HR applications, or collaboration tools to minimize custom code required
- Activity-specific solutions and templates that offer easy deployment and configuration such as onboarding, member portals, or board of director dashboards
- Global multisite management with support for multiple languages, local points of presence or datacenters, and adherence to regulatory guidelines
- Financial stability and ability to support future solutions as user expectations evolve
- A strong partner and developer ecosystem for implementation, support, and technology integrations

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

RWS

After a thorough evaluation of RWS' strategy and capabilities, IDC has positioned the company in the Leaders category within this 2021 IDC MarketScape of worldwide content management systems for authenticated digital workspaces.

RWS offers a component content management system under the product name of Tridion.

Quick facts about RWS are:

- **Digital workspace best use:** Customer and partner portals
- **Global footprint:** Major presence in the Americas and EMEA, with expansion in APAC
- **Top industry areas:** Technology, healthcare, business information, and finance
- **Ideal organization size:** Small to large enterprise
- **Cloud type:** PaaS
- **Architecture:** Headless and 60-70% microservices based
- **Web technology, scripting, and coding languages:**.Net, Angular, Java, React, Vue, ASP, CoffeeScript, CSS, GML Groovy, JavaScript, LESS, Lua, Perl, PHP, PowerShell, Python, Ruby, Sass, and TypeScript
- **Based on open-source code:** <10%
- **Key differentiator:** Tridion's BluePrinting and Baselining technology provide centralized control, version management, and reuse of content to handle complex multilingual, multiregion, multibrand, and multichannel projects from a fully decoupled architecture offering headless publishing using a GraphQL integration framework.

Strengths

- **Localization and translation:** Tridion benefits from RWS' own machine translation technology to automate localization of content and imagery based on language selection. Tridion's atomic design of content creation and management is well suited for real-time translation and dynamic delivery.
- **Authoring environment:** Content authors can use the site building wizard with a headless design extension to provide a consistent single view of the customer and employee content. Tridion provides a knowledge graph for content visualization, user interface for conversational IoT content (e.g., Alexa simulator), and insight to content voice and tone.
- **Architecture framework:** Tridion offers rigorous content modeling, content component inheritance, and reuse across any combination of sites, regions, brands, and channels. For customers, employees and partners that work in China, Tridion provides a publishing process that helps reduce latency for the user experience.

Challenges

- **Personalization and AI:** RWS has begun incorporating AI/ML into its products. The next step is for RWS to natively show in context of its graphical database visualization capabilities the facets, content recommendations, and content insights both for the content author and the end consumer of the experience.

- **Road map:** Tridion began its journey as a pure-play CMS before it was acquired by SDL, a language service provider (SP), and most recently by RWS, also focused on language services and technology. RWS will need to remain focused on the features specific to advancing the CMS as Tridion settles into its new portfolio.

- **Integration framework:** Tridion has transitioned to GraphQL for the content management and delivery interfaces and needs to formalize the integration connectors to enterprise applications such as Slack, Workday, and Jira that are everyday interactions for employees and the data interactions that feed the customer and partner journey.

Consider RWS When

Consider RWS Tridion if you are a multinational organization that has complex content structures that would benefit from a componentized architecture and automated machine translation capabilities to dynamically assemble authenticated and personalized digital experiences.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed. For this IDC MarketScape, vendor size was determined by IDC's 2021 Software Tracker and validated by each vendor on their revenue in the market. For details regarding the vendors and size of the CMS market, see *Worldwide Persuasive Content Management Applications Market Shares, 2020: Market Leaders Shift as Cloud-Based Solutions Gain Traction* (IDC #US46252521, May 2021).

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

Digital workspace applications curate, manage, publish, and deliver editorial, image, rich media, and product content to omni-channel experiences including websites, mobile apps, social networks, digital signs, IoT apps, and conversational interfaces. CMS solutions can be either open source or commercial with an architecture that can be characterized by how the front-end presentation and delivery connects to the back-end content engine. IDC identifies the CMS architectures in this document in the following ways:

- **Single-stack** platforms provide a single application that tightly couples the back-end content management engine to the front-end presentation design and delivery engine to create, edit, and publish digital content such as text, images, audio, video and interactive graphics for websites and mobile web apps.

- **Decoupled** solutions act as a single application but are designed with separate back-end and front-end services that communicate independently through an API framework, allowing for flexibility in data management and event handling.

- **Headless** solutions provide a backend-only content engine, leaving the presentation layer to be designed and custom developed using a front-end framework and accessing the content and back-end services via APIs. The architecture is often associated with microservices for large, distributed networks such as cloud environments.

CMS solutions can also be deployed on-premises or in multiple cloud configurations. IDC defines its cloud taxonomy with the following:

- **Multitenant software-as-a-service applications (SaaS apps)** services are based on a service composition and delivery model made up of a utility computing environment in which unrelated customers share a common application and infrastructure resources that is managed by an independent software vendor (ISV) or a third-party service provider.

- **Platform-as-a-service (PaaS)** solutions are designed and offered as private cloud-ready solutions. IT assets are typically owned and managed by the customer and dedicated to a single customer. Whether designed for public or private cloud, all PaaS, at a minimum, must conform to IDC's eight basic cloud characteristics: solution packaged, shared/standard services, elastic resource scaling, self-service, elastic term-based pricing (no perpetual license), ubiquitous (authorized) network access, standard UI technologies, and published service interface/API.

- **Single-tenant software** can be deployed in either a public or private cloud where each instance of the software is dedicated to a single customer for an extended duration.

- **Public cloud** services are shared among unrelated enterprises and/or consumers, open to a largely unrestricted universe of potential users, and designed for a market, not a single enterprise with resources which can be quickly (less than one hour) reallocated to another customer.
- **Private cloud** services are shared within a single enterprise or an extended enterprise, with restrictions on access and level of resource allocation. Dedicated hardware can be also virtualized or bare metal, but in either case, the entire system (physical compute and storage plus virtual private network) is used only by a single customer and cannot be reallocated to another customer in less than one hour.

LEARN MORE

Related Research

- *Operational Considerations of a Modern Content Management System* (IDC #US48196521, September 2021)
- *Worldwide Persuasive Content Management Applications Forecast, 2021-2025* (IDC #US46252421, May 2021)
- *Worldwide Persuasive Content Management Applications Market Shares, 2020: Market Leaders Shift as Cloud-Based Solutions Gain Traction* (IDC #US46252521, May 2021)
- *IDC's Worldwide Software Taxonomy, 2021* (IDC #US47588620, April 2021)
- *Delivering Multichannel Digital Customer Experiences: Shifting Preference for Interlocking Cloud Technologies* (IDC #US46252321, March 2021)

Synopsis

This IDC study provides an assessment of the principal content management systems used for authenticated digital workspaces and presents the criteria most important for companies to consider when selecting a content management solution. This assessment discusses both quantitative and qualitative characteristics that explain success in the authoring and delivery of personalized content within an authenticated website or mobile environment. The evaluation is based on a comprehensive and rigorous framework that assesses vendors relative to the criteria and one another. The study highlights the factors expected to be the most influential for success in the market during both the short term and the long term.

"The recent unprecedented disruption on business shifted work online, placing an increased demand for scalable authenticated digital workspaces to serve the employees, partners, suppliers, and existing customers across multiple devices and channels," said Marci Maddox, research director, IDC's Digital Experience Strategies program. "Organizations cannot afford to dismiss the technology that is at the heart of the digital experience – modern content management systems streamline the content value chain and orchestrate the ebb and flow of information inside and outside the organization across many digital channels. The traditional content creation and delivery process can now be augmented with automation, intelligence, and flexibility to enhance the transactional work environment for the end user."

About IDC

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