

IDC MarketScape: Worldwide Headless Content Management Systems 2023 Vendor Assessment

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THIS IDC MARKETSCAPE EXCERPT FEATURES AMPLIENCE

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Headless Content Management Systems Vendor Assessment



Source: IDC, 2023

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

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Headless Content Management Systems 2023 Vendor Assessment (Doc # US50826923). 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

From its inception, the content management system (CMS) was designed to create and manage web, mobile web, and other HTML browser-based experiences. Since then, CMS systems have evolved to publish content into app experiences on mobile, IoT, and other connected devices. The shift to accommodate a variety of content owners, web developers, modular cloud-based architectures, and content services has expanded the software options beyond traditional web content management platforms to include new headless alternatives.

In its simplest form, a headless CMS is used to create and manage content in an application programming interface (API)-accessible repository. The primary characteristic of a headless CMS is that the online presentation layer that end consumers engage with is not an embedded function of the application, but instead is a separate, custom-built standalone software application that is integrated to the functional logic of the CMS via an abstraction layer, such as an application programming interface. The headless CMS must have 100% of its front-end-dependent functionality accessible via external public-facing APIs. The code base for the front-end delivery application must be thoroughly decoupled from the code for any other functions within the system; otherwise, the system as a whole is not headless.

It is of critical importance to bear in mind that *the whole composed system is what is ultimately headless*; whether or not this applies to individual composable applications or services (modules) integrated into the system is a matter of individual interpretation.

Because the back-end content functions are separated from the presentation layer, there are capabilities that have been historically available to the content authors that now must be built out by the developer. For example, editors would like to preview the content in context of the web page or mobile app it will be viewed. Headless CMS, by definition, does not care about the "head" or the presentation layer; therefore, editors must work in the headless CMS' form-based user interface (UI), and developers must code and set up preview environments for the editors. Stackbit is an option that uses a single configuration file to connect any headless CMS to a preview environment with inline visual editing that allows content editors to view and launch pages without reliance on a developer. Content authors can use Stackbit's visual editing experience with the guardrails set by the design system and avoid breaking the front-end app.

Digital Experiences Require a Modern CMS at Its Core

Rising customer expectations have organizations pivoting their business to a fully digital system. From retailers to restaurants, educational institutions, and government offices, every organization relies on its online presence to communicate, educate, and fulfill requests on an unprecedented scale across a hyperconnected digital environment. There is a renewed focus on customer experience, which is improved with the adoption of personalized, automated, and transformed digital experiences. Other trends of note include:

- **Content value streams:** Content is a core element of the digital customer experience. The modern CMS will orchestrate the content value stream across the various stakeholders in the organization with a seamless fluid motion. Also important is identifying the streams that provide an opportunity for the business and its customers to exchange value tied to the process by which data and information flows through an organization and along the way accumulates context and form to become enriched content elements. With each iterative touch point of activity along the customer data journey, content strengthens its value.
- **First-party data:** Driven by data trust and the impacts of evolving regulatory demands, there is a reduction in the utility of third-party data and cookie-based customer insight. Users are demanding greater privacy – including transparency, choice, and control over how their data is used – and it's clear the digital experience ecosystem needs to evolve to meet these increasing demands. As a result, businesses must take ownership in understanding and responding to user behavior and expectations.
- **Design systems:** As organizations manage an increasingly broad range of digital touch points with their audiences, more of them are investing in fully digital design systems that can accelerate development and improve brand consistency at the edge. Creative designers are teaming up with web developers to build engaging front-end digital experiences that leverage the back-end content engine of the headless CMS.

Architectural Considerations

The developer-intensive headless CMS is a good fit for organizations that need a fully customized front-end delivery and have strong development resources in place. The modern headless CMS will orient toward no-code or low-code content creation (drag-and-drop authoring and administration, intelligent content recommendations, roles/usage-based templates), presentation design freedom, automated decision-driven workflow, and contextual preview of delivery. Architectural elements of consideration include:

- **Componentized content:** 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 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 standards, like the Web Content Accessibility Guidelines (WCAG), promote better content enrichment to support accessible websites that provide an inclusive experience for everyone, optimized across device (desktop browser, voice browser, mobile phone browser, automobile displays) or operational constraints (noisy surroundings, limited lighting, 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 MARKETSCOPE 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 headless 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 headless 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 from a commercially supported business-packaged offering
- Deployment in the cloud as managed hosted private cloud and PaaS or SaaS in a public cloud
- Clients in cloud production for at least 12 months
- Targets and scales to meet the needs of midsize to large enterprise organizations supporting 500+ employees, with approximately 50% of customers in this range
- Provides capabilities to create and manage websites or authenticated workspaces with support for the following capabilities:
 - Creation, curation, and management of content that can be assembled and approved for publishing web pages, mobile websites, and web apps
 - Content repository that provides library services to organize and maintain various content types and its metadata
 - Security, roles, and permissions management
 - Analytics and reporting at the infrastructure, content, and user experience layers
 - Interoperability with adjacent technologies via well-documented web services, open APIs (either GraphQL or REST API), or SDKs

ADVICE FOR TECHNOLOGY BUYERS

Content management systems are evolving in terms of advanced functionality and a shift to cloud-native, microservice architectures. As organizations refine their digital experience strategy, buyers have a choice of CMS technology options that cater to the needs of the business. The modern headless CMS is designed to get business users up and running quickly and effectively streamline the content processes and support front-end-designed sites through API access points.

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 headless CMS 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., marketers, brand managers, developers, and administrators)
- A modern, API-first, microservices-based architecture to ensure performance and ease of integration
- An innovation strategy with support for AI/ML, conversational interfaces, personalized content, 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 a content delivery network (CDN), customer data platform (CDP), digital asset management (DAM), personalization tools, and commerce systems to minimize custom code required
- Industry-specific solutions and content taxonomies that align to the buyer's use cases (e.g., retail, manufacturing, financial services, and healthcare)
- 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.

Amplience

After a thorough evaluation of Amplience's strategies and capabilities, IDC has positioned the company in the Leaders category within this 2023 IDC MarketScape for worldwide headless content management systems.

Amplience was established in 2008 and is headquartered in London, the United Kingdom. Amplience offers a headless CMS under the name of Amplience Dynamic Content.

Quick facts about Amplience:

- **Employees:** <250 employees
- **Global sales/support:** Global direct and partner sales/support except China
- **Cloud hosting presence:** Australia; Japan; Europe, the Middle East, and Africa; South America; North America
- **Cloud type:** SaaS multitenant
- **Supported frameworks, scripting, and coding languages:** Angular, Java, Node.js, React, Vue, Svelte; front-end-agnostic scripting languages
- **Pricing model:** Subscription, usage, seat
- **Open source code base:** <10%

Strengths

- **Authoring environment:** Ampliance provides native templates for design and atomic content component assembly, allowing visualization of the content model and experiences across touch points. Ampliance's heritage in content and digital commerce brings together rich media, content, and personalization to data-driven applications.
- **Visualization and preview:** Ampliance separates content creation from visual delivery in a headless environment by automatically rendering the content in the destination experience via the Virtual Staging capability. Ampliance integrates the content calendar with the experience preview in real time and for future scheduled content and campaigns.
- **Performance and scale:** Ampliance is one of the few vendors in this evaluation that delivered at 99.99% uptime. Ampliance offers automatic code deployment, load balancing, content delivery network, and staging sites as part of the service.

Challenges

- **Administration environment:** Ampliance recently delivered new self-service user management to address limitations that customers interviewed for this evaluation found difficulty in configuring new features in the past. Developers or partners are needed to define and refine component types.
- **Design and workflow:** Ampliance does not offer a native no-code workflow visualization and does not integrate with a design tool like Figma. The application has limited support for annotations or markup to content in approval workflows.
- **Localization:** Ampliance only provides the practitioner user interface and documentation in English. Content can be created, grouped, and filtered into localized versions that can then be used with connectors for Translations.com, Yandex, or other plug-ins for automated translation. Localized versions of content support additional required fields.

Consider Ampliance When

Consider Ampliance when you are a commerce-focused organization that needs a highly transactional CMS with API access and control over the creation, management, and visualization of content.

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 2022 Software Tracker and validated by each vendor on their revenue in the market. For details regarding the vendors and size of the website market, see *Worldwide Website Software Market Shares, 2021: Headless Content Management Gains Traction* (IDC #US50451723, March 2023) and *Worldwide Persuasive Content Management Applications Market Shares, 2022: Data-Driven Personalization in Customer Experiences* (IDC #US50669623, May 2023).

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 experience 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. IDC categorizes the headless CMS architecture as follows:

- **Application programming interfaces (APIs):** API frameworks allow communication between the back-end and front-end software as well as connection between data sources using RESTful, CLI, or GraphQL interchanges.
- **Front-end presentation layer:** The front-end applications control the design elements of how the data will be displayed to the end user – for example, HTML controls the layout on a web page, the design is controlled by Cascading Style Sheets (CSS), and basic logic would be enabled through JavaScript. Developers can build single-page applications (SPAs) and progressive web applications (PWAs) to control the end-user experience.
- **Headless CMS:** The online presentation layer that end consumers engage with is not an embedded function of the application, but instead a standalone software application that is integrated to the functional logic via an abstraction layer, such as an API. The headless application must have 100% of its functionality accessible via external public-facing APIs and maintain design-agnostic raw content elements and does not generate any front-end code.

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 resource 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: packaged solutions; 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 (e.g., AWS, Azure, and GCP).
- **Private cloud** services are shared within a single enterprise or an extended enterprise, with restrictions on access and level of resource dedication, and defined/controlled by the enterprise, beyond the control available in public cloud offerings (e.g., vendor- or partner-dedicated cloud).

LEARN MORE

Related Research

- *IDC MarketScape: Worldwide Hybrid Headless Content Management Systems 2023 Vendor Assessment* (IDC #US50827823, forthcoming)
- *Worldwide Persuasive Content Management Applications Market Shares, 2022: Data-Driven Personalization in Customer Experiences* (IDC #US50669623, May 2023)
- *Worldwide Website Software Market Shares, 2021: Headless Content Management Gains Traction* (IDC #US50451723, March 2023)
- *Customer Data Influences on Content Marketing and the Customer Experience* (IDC #US50455223, March 2023)
- *Worldwide Economic Outlooks and Attitudes on Customer Data Investments for Customer Experiences* (IDC #US50524523, March 2023)
- *Top 10 IDC FutureScape Predictions Influencing Content Management Technology and the Customer Experience* (IDC #US50414323, February 2023)
- *The Unified Content Model – A Modern Approach for the Digital-First Business* (IDC #US49880522, December 2022)
- *IDC Market Glance: Persuasive Content and Digital Experience Management Software Ecosystem, 3Q22* (IDC #US48611022, August 2022)

Synopsis

This IDC study provides an assessment of the headless content management systems used for persuasive digital experiences and presents the criteria most important for companies to consider when selecting a headless content management solution. This assessment discusses both quantitative and qualitative characteristics that explain success in the authoring of personalized content to be delivered by a custom-developed, front-end brand or consumer website, mobile web app, or other digital delivery channel. 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 advancements in developer tools and cloud resources have organizations looking at headless content management systems as a way to build out a custom front-end site while retaining the robust content services needed to feed it," said Marci Maddox, research vice president, IDC's Persuasive Content and Digital Experience Strategies program. "Organizations cannot afford to dismiss the technology that is at the heart of the digital experience – modern content management systems that streamline the content value chain and orchestrate customer engagement across many digital channels."

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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