

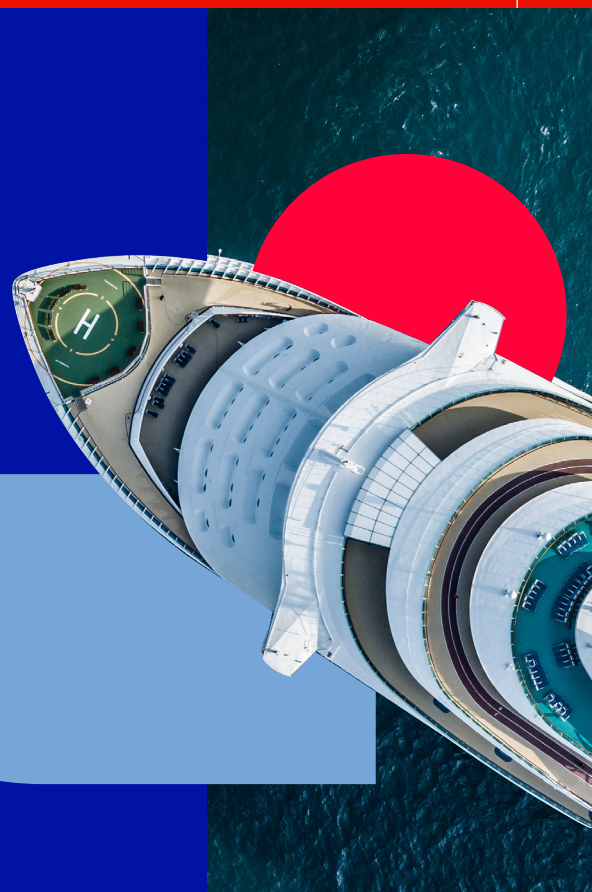
Adobe

Headless CMS vs. traditional.

A business case



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  height: 10px;  
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Introduction

For a long time computers and browsers were the main vehicle for content consumption, with blogs and videos hosted on desktop browsers being our go-to information sources.

That content would be created and delivered to audiences by marketers via a traditional content management system. Gradually computers got smaller and more integrated into our day to day lives. Smart phones, voice devices, in-car technology and wearable devices have all changed the way people consume content, so it stands to reason the way we build content experiences needs to change too. The explosion of communication channels is bringing complexity to organisations and marketing teams. Creating and delivering omni-channel content can be time consuming, resource heavy and sometimes impossible. That's where headless technology comes into play.



Headless content management systems (CMS) have been on the horizon for years in the developer community, but have more recently started to infiltrate conversations in the marketing sphere, leading to some confusion regarding what it is and why marketers might need it.

It's important for marketers to understand the pros and cons of a headless vs. traditional CMS solution. Both have their merits, but whether you choose to use a headless, traditional or hybrid solution will depend on specific use cases, channels and audience.

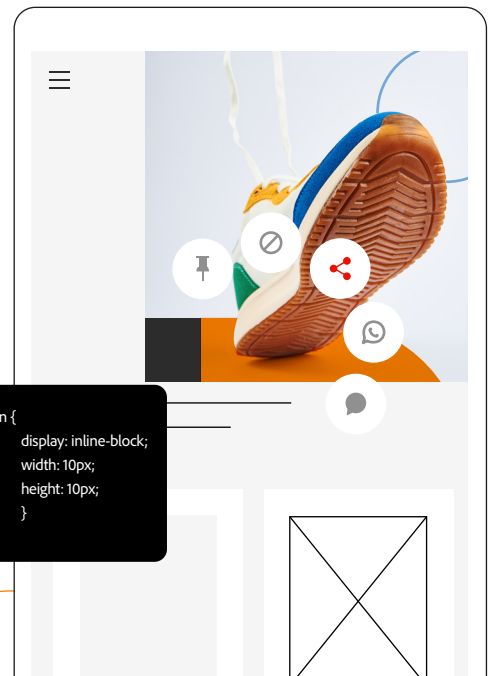
This paper aims to explain the key differences between traditional, headless and hybrid utilising real-world examples, with a view to helping you make an informed decision on your CMS strategy and building a robust business case to support it.

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What is a **headless CMS** and how does it differ from a traditional CMS?

A flexible solution empowering marketers and developers to create and deliver experiences faster across any channel.



A headless content management system, or headless CMS is a back-end only content management system that acts primarily as a content repository where you create, manage and centrally store content. That content is delivered across unlimited channels and devices via an API (Application Programming Interface) for display on a wide variety of devices, without the need for a built-in front-end or presentation layer. The term 'headless' comes from the concept of chopping the front-end head (where the content is presented) off the back-end body (where the content is managed).

How does **headless CMS** work?

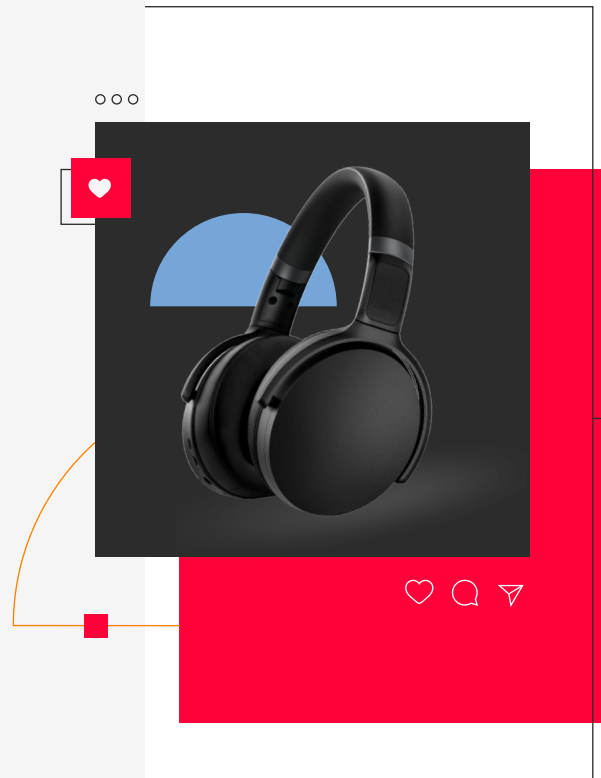
It all starts with what we at Adobe call content fragments. Content fragments are channel agnostic and can be delivered across multiple channels via APIs.

No need to create and duplicate content for specific channels, content fragments are delivered via a system of APIs and rendered on any channel.

As a marketer, you see your original content fragment quickly and effectively distributed across Facebook Messenger; WhatsApp; Apple Watch; Twitter; Instagram and basically any other channel or device you can think of where an API exists.

What is the difference between a traditional content management system and a **headless CMS**?

Unlike content delivery with a traditional CMS (also known as a “headful” CMS), a “headless” CMS allows you to create content once and reuse it everywhere, delivering the same experience quickly and easily to any channel via a single push.



Traditional CMS

In traditional content delivery, the CMS manages the content and presentation logic, and outputs fully formatted HTML.

Content is combined with a layout to deliver an HTML-based web front-end experience.

A traditional CMS makes it easy to publish to a single channel, such as a website. But it isn't designed to manage content for multiple channels, where content presentation is vastly different across each.

Every piece of content requires its own code, resulting in each asset being re-created again and again, which consumes more time and resources.

Headless CMS

In a headless CMS, content is decoupled from the presentation layer (the head), creating blocks of content that can be delivered in a channel-neutral format to power any channel or experience.

The same piece of content can be used in an email, mobile app, webpage, digital billboard, social post, and more.

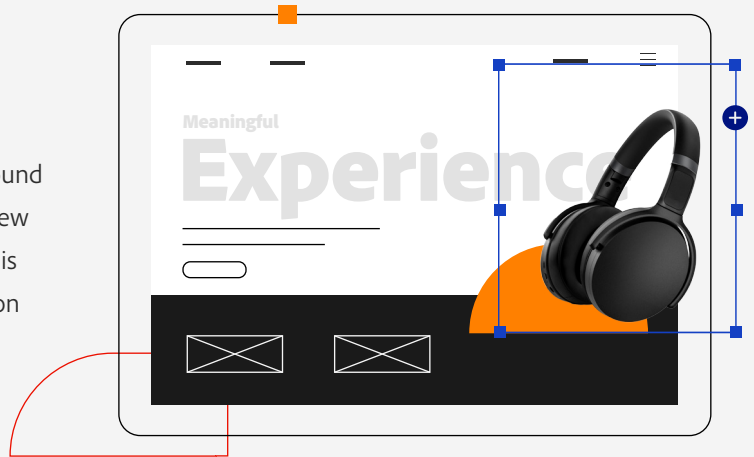
Headless makes it possible to scale content almost infinitely without losing the personality of your brand or requiring new code for each platform.

A headless CMS exposes content as JavaScript Object Notation (JSON) through well-defined APIs. Developers can access content from the CMS using APIs and then render it in their customised applications, like a single-page application (SPA), IoT, or mobile app.

Reasons to use headless CMS.

Accelerated time-to-market

Headless CMS makes it easy for you to incorporate, modify, and distribute your content. Since the content is only loosely bound to the front end by the API, you can target new channels without changing the back end. This cross-platform support increases optimization and decreases time-to-market significantly.

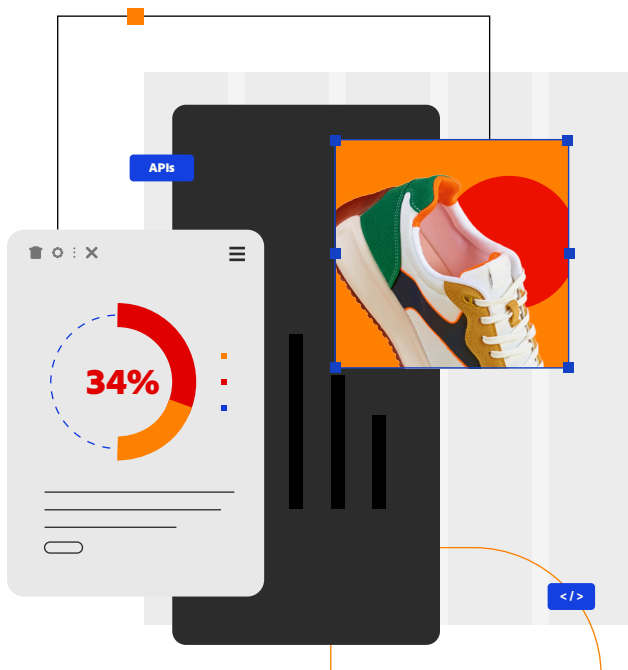


Performance

A headless CMS helps keep your website performing at its best. Without the need for plug-ins, headless CMS enables you to leverage the latest tools, libraries, and frameworks without slowing down the speed of your website.

Developer benefits

A Headless CMS gives your developers the ability to work with the best tools, improving the quality and speed of their output. By utilising APIs and data formats like JSON to communicate and access content, they can use the latest technology and tech stack of their choice. Additionally, being API-based you can decide to switch from one headless CMS to another without incurring technical debt or loss of time.



Omnichannel freedom

With headless you have the freedom to decide where and how your content is delivered. As long as an API exists for that channel you can distribute content on it.

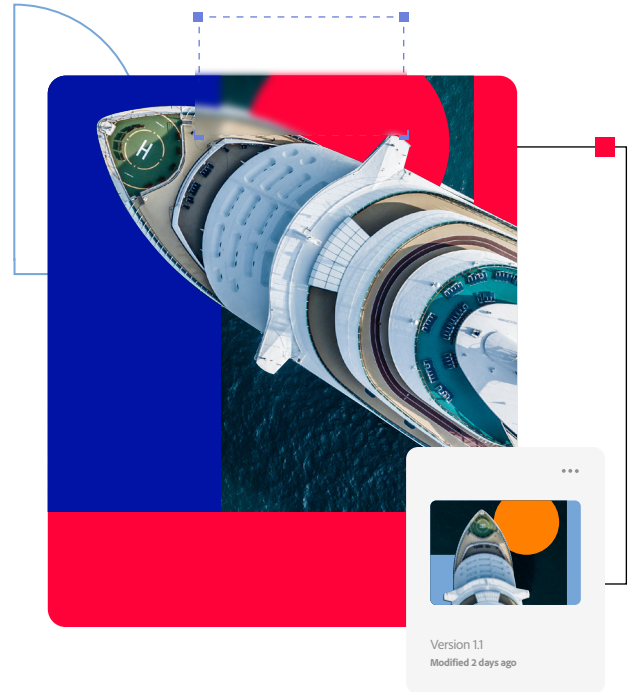
Reliability

With headless, your sites are protected from digital disasters including unforeseen traffic spikes and loss of data. Should an issue occur, your data is stored in the cloud meaning you can quickly restore your operations thanks to the reliable digital backup.

Faster content editing and authoring

Headless CMS provides a streamlined experience for content teams by allowing stakeholders to author and edit content without worrying about the front-end presentation and delivery. They also don't need to wait until developers are done coding to complete their work.

Editors can also decide to adopt a new content delivery channel, without the need to re-author content to fit that channel, avoiding duplication of content and making existing content easier to manage as you expand to new channels.



Security

Since the front end is separated from the back end headless will be less vulnerable to DDoS attacks. With only one access point, the API, the surface area of security attacks is smaller.

Future proof content

With headless, there are no boundaries to the number of digital experiences you can create with your content and the channels you can reach. As new technologies emerge, headless enables you to create hyper relevant digital experiences.

Leaner no-bloat systems

With headless, you don't have to deal with bloated systems or legacy software. You decide the tools you want to integrate into your products. Making it leaner, faster, and easier to keep up-to-date.

Reasons to use a traditional CMS.

Simple website

When your website is simple and out-of-the-box templates will be sufficient, traditional CMS capabilities are a straightforward option.

Small numbers of developers

When you don't have a large team of developers, it will be easy for developers and content creators to communicate and collaborate within one platform.

Development cost

While the lack of a front end presentation layer with headless means more flexibility, it comes at an additional cost. Without the presentation layer that comes with traditional CMS platforms, developer time will need to be spent on creating it.



Upfront cost

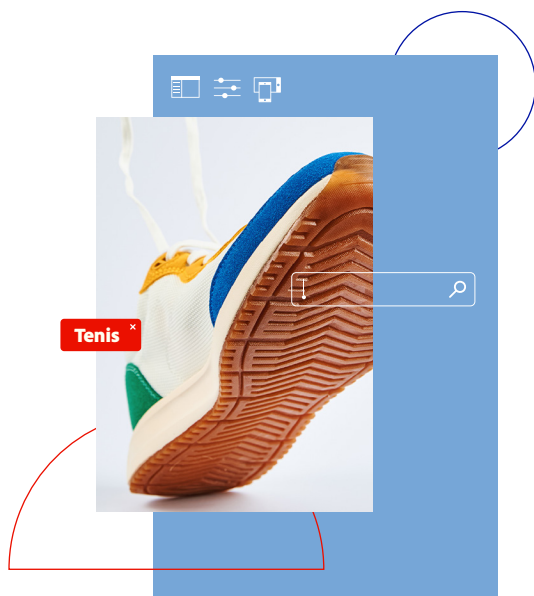
The upfront cost of implementing a headless system that will affect ways of working for multiple significant stakeholders can't be ignored. It's a significant investment in your longer term competitive advantage. Traditional CMS avoids this.

Limited numbers of marcomms channels

When you have only one or two channels for delivering content (i.e. your website or mobile app).

Retaining marketing control

When you want to have full control over the content, from creation to display, the simple WYSIWYG editor is a key component of traditional CMS software.



Use cases for traditional and headless CMS.

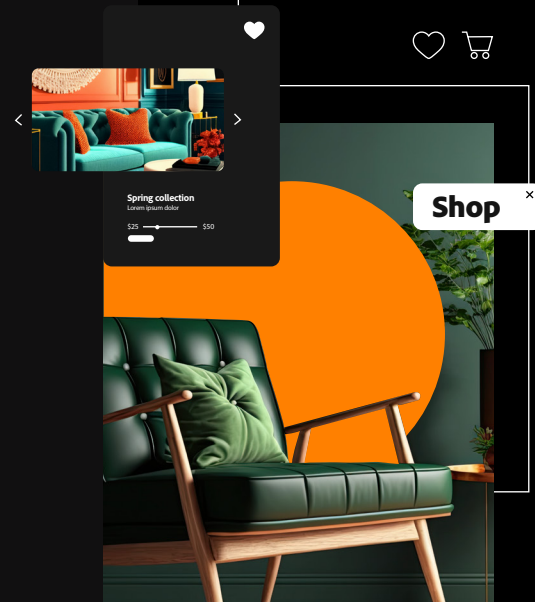
Headless CMS use case

Product-led example

Rebrand of an e-commerce company following a merger.

Need

To edit, rebrand and re-publish multiple content and comms in the most efficient way possible, avoiding any reduction in service, inconvenience to customers or inconsistencies in branding and message.



Adobe Experience Manager Sites enables multiple stakeholders to edit, rebrand and publish content.

Using headless capability, each rebranded piece of content can be rapidly deployed across all company channels, enabling a company-wide rebrand to be delivered quickly across multiple touch points without the responsibility falling to one department holding full ownership.

This reduces bottlenecks whilst still maintaining overall control. Resulting in brand consistency, retention of customer confidence and loyalty in spite of the rebrand, and a reduction in business disruption as a consequence of the merger.

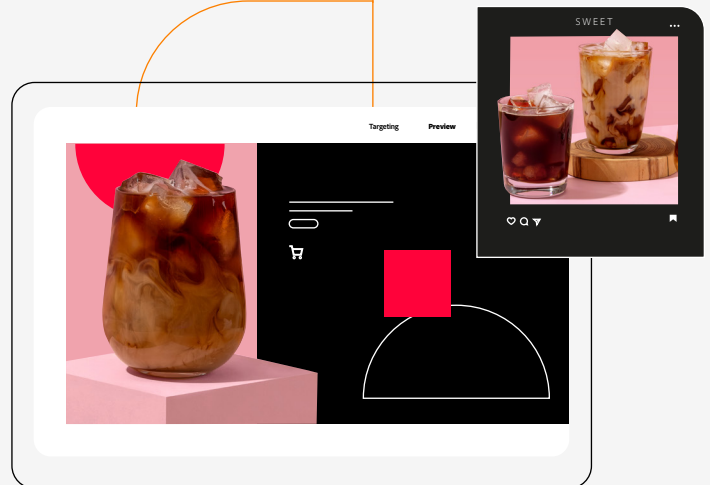
Service-led example

A chain of coffee shops severely affected by local restrictions in response to a global pandemic.

Need

To communicate revised terms of service to customers following a change in business strategy and service plan, meaning customers are no longer allowed inside stores to make a purchase.

By utilising headless capabilities offered by Adobe Experience Manager Sites, this coffee shop chain would quickly be able to deliver communications across multiple platforms including mobile; smartwatch devices; tablets and social media platforms, making customers immediately aware of the latest



restrictions and the resulting measures put in place by the coffee shop. Flexible, real-time communication in response to the restrictions could easily continue for the duration, supporting the business to retain customer loyalty and maximise profits during this difficult period.

Traditional CMS use case.

Service-led example

Medical company opening a new specialist clinic.

Need

To create a new multi-page section on their existing website dedicated to the new clinic and its services.

Multiple web pages need to be written and designed in line with the company brand.

Once launched, the website is likely to have less frequent updates with no need for cross platform updates or communications.

A traditional CMS will allow the marketing team to make these straightforward updates to the website, without developer input or additional cost required. Given the nature of the changes, and the fact that they're unlikely to be regularly updated, it makes sense to deliver this project as simply and cost effectively as possible, without delaying the clinic going to market.

Hybrid CMS.

A hybrid CMS provides all the benefits of a headless and traditional CMS with the ability for marketers to use simple tools for managing and updating experiences, such as editing Single Page Application (SPA) content in a WYSIWYG interface.



Hybrid CMS also provides support for developers to build experiences on their own frameworks.

Unlike using two separate content platforms which can lead to inconsistent messaging, duplicated efforts, and wasted resources a hybrid CMS is one system that includes a single source of truth.

If your business or market has a need for elements of both traditional and headless CMS, Adobe Experience Manager Site's hybrid capability is a great option.

Reasons to use hybrid.

Consistency across channels

Deliver consistent experiences across web and emerging channels with the ability to edit and reuse content. Because a hybrid CMS allows you to integrate with various systems, you can easily personalise these experiences with data from analytics and targeting tools.

Quicker content delivery

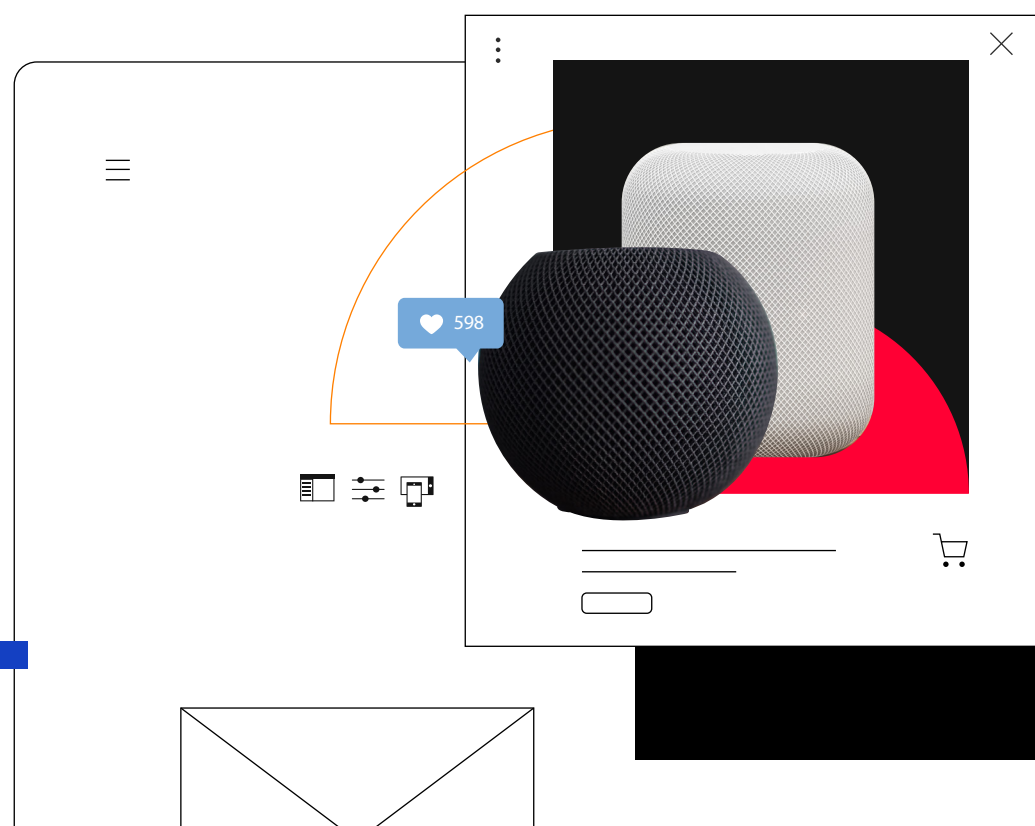
Create context-rich experiences that scale across organisations, products, and regions, without relying on developer support. With a hybrid CMS, not only can you easily edit web experiences, but you can do the same for content that's delivered in a headless manner, like digital signage, wearables, and other IoT devices.

More content control

A hybrid CMS gives marketing greater control and input into the customer experience. At the same time, developers can be more efficient using their preferred frameworks and tools.

Future-ready experiences

Because the headless portion of this CMS allows brands to deliver to any channel framework, your content is automatically futureproofed for any emerging platforms.



Introducing Adobe Experience Manager Sites.

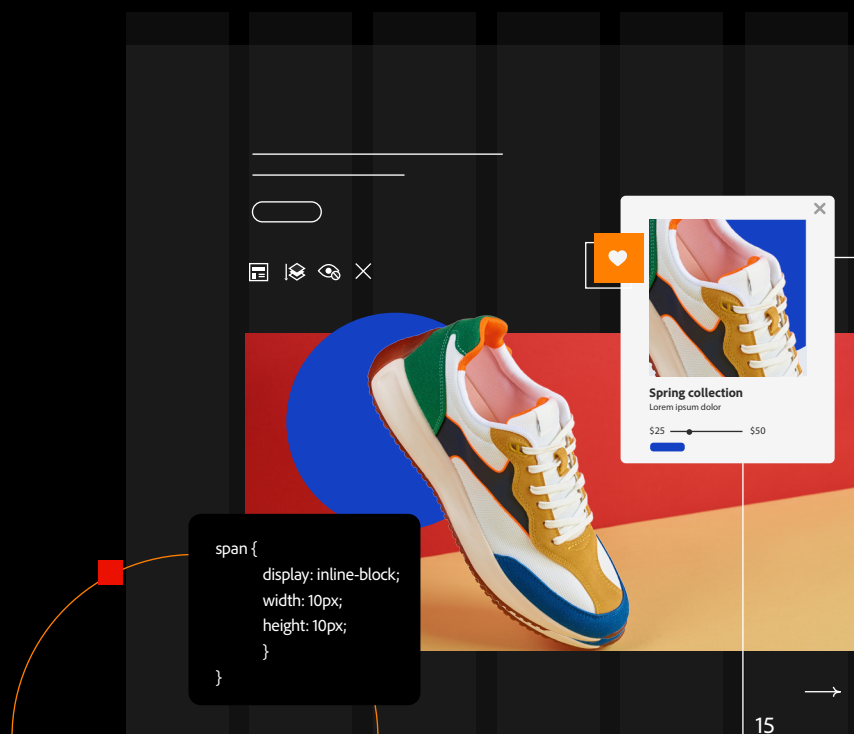
Adobe Experience Manager (AEM) is a content and digital asset management application that allows organisations to create, manage and deliver content across every digital touchpoint.

AEM Sites provides a full combination of rich headless capabilities, comprehensive traditional CMS modes, and powerful single-page application (SPA) tools to deliver immersive experiences everywhere, making it easy for marketers and developers alike.

Our comprehensive content management solution streamlines the process of managing content assets. You can manage documents, images, videos, PDFs, online forms, and more.

Built on Adobe Cloud technology, AEM Sites helps you easily access and use assets from anywhere to support your digital experience without the complexity of networking protocols.

Developers get full flexibility to deliver content headlessly, while marketers can accelerate content across more channels, maximise reuse, and deliver tailored experiences.



Adobe Experience Manager Sites is the marketer and developer friendly content management system (CMS) built to deliver personalised experiences to any audience on any channel - without having to compromise on speed or scale.

[Learn more](#)

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