

Breaking Legacy Barriers: A Developer's Playbook for Headless CMS



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Introduction

In today's digital economy, experience is everything. Whether engaging customers, enabling employees, or supporting partners, organizations are under growing pressure to deliver seamless, personalized, and consistent interactions — across every channel, in real time, and at scale.

This challenge increasingly falls to CIOs and their development teams.

As technology leaders seek to modernize experience delivery, they are finding that traditional content management systems (CMSs) are no longer fit for purpose. Built for static publishing and desktop websites, these legacy platforms are now holding teams back — limiting speed, flexibility, and integration in a world that demands continuous innovation and omni-channel orchestration.

This report explores:

- Why traditional CMSs are breaking down under modern experience demands
- The evolving role of developers in orchestrating experience at scale
- How modern CMS architectures enable agility, reuse, and omni-channel content delivery
- What to prioritize when selecting a CMS for developer-driven, enterprise-scale experience needs
- How transforming content delivery unlocks the foundation of experience-orchestrated (X-O) business

AT A GLANCE

KEY TAKEAWAYS

- » Legacy CMSs slow developers down.
- » Modern CMSs give developers more control.
- » CMS developer collaboration with other technical, operational, and businesses teams is no longer optional.
- » Content is part of the technical architecture.

“By adopting flexible, developer-first CMS architectures, developers can break from legacy limitations and unlock the agility, scalability, and intelligence needed to deliver exceptional digital experiences — faster, smarter, and at scale.”

The Content & Experience Disruption: Why Businesses Must Evolve Now

Today's CIOs and digital leaders are navigating a growing divide between the experiences their organizations want to deliver and the capabilities of the systems underpinning them. Legacy CMS platforms, once sufficient for managing content on a single website, are now a liability in an environment where customer, employee, and partner experiences must be intelligent, real time, and omni-channel by design.

Traditional CMS Architectures Cannot Keep Up

Monolithic content management systems were built for publishing content, not for evolving with the modern technical requirements of orchestrating experiences. These systems begin to break down as each service added to the code base places constraints on the whole system, limiting organizational agility and slowing down business processes (see *IDC MarketScape: Worldwide Hybrid Headless Content Management Systems 2023 Vendor Assessment*).

As digital ecosystems have expanded beyond websites to include mobile, apps, portals, kiosks, and more, these tightly coupled systems fall short in three critical areas:

- **Developer velocity** is constrained by outdated tools, with limited code reuse, and by the inability to adapt the UI to new channels and devices.
- **Marketer autonomy** is stifled by inflexible workflows and a lack of content reuse.
- **Organizational agility** suffers due to customization-heavy deployments, fragile integrations, and poor extensibility.

Digital Experience Is Now a Strategic Engineering Challenge

Delivering exceptional experiences across every digital touchpoint requires more than a good user interface; it demands composable architecture, scalable APIs, and content systems built for orchestration.

However, today's CMS landscape reflects a reality that complicates this goal: Technical development authority is increasingly distributed across business units. Nearly half (49.5%) of the organizations surveyed by IDC reported that marketing leads CMS technical development and takes ownership of content models, integrations, and delivery. This growing cross-functional ownership requires architectures that support flexibility for developers and usability for business stakeholders.

Modern digital leaders are addressing this by adopting hybrid headless CMS platforms that provide:

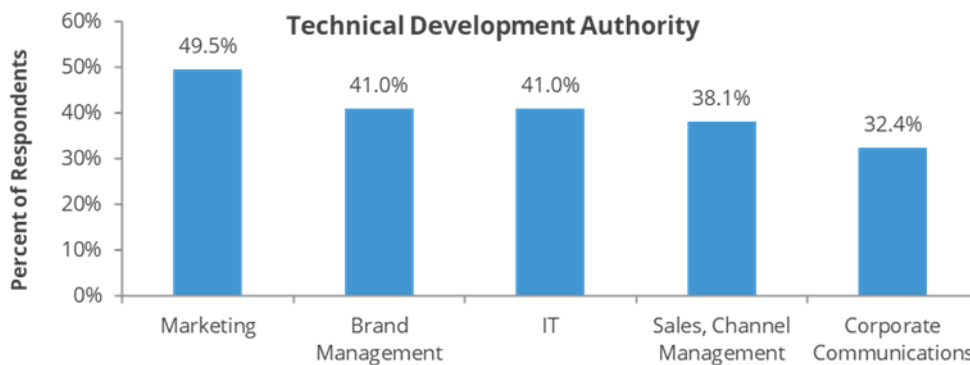
- **API-first delivery models:** Architectures that prioritize RESTful and GraphQL APIs, enabling developers to work with modern frameworks such as React, Next.js, and Vue without platform constraints. APIs allow seamless content delivery across web, mobile, apps, Internet of Things (IoT) devices, and emerging digital channels.
- **Visual editing capabilities for business users:** Interfaces that offer intuitive visual editing, real-time previews, drag-and-drop assembly, and structured workflows. These features empower marketing and content teams to create, manage, and optimize

experiences independently, reducing bottlenecks while maintaining governance standards.

- **Componentized, reusable content structures:** Content is designed as modular components that can be reused, dynamically assembled, and personalized at scale. This approach improves operational efficiency, ensures brand consistency, and accelerates the rollout of localized and personalized experiences across channels.
- **Cloud-native, scalable infrastructure:** Platforms designed for elasticity, multi-region support, and high-availability delivery. Cloud-native CMS architectures enable organizations to meet traffic spikes, scale globally, and integrate with modern DevOps and deployment pipelines without compromising performance.

This architectural shift not only unlocks performance and scalability but also transforms content into a **programmable asset**, ready to power the orchestration of intelligent, consistent experiences across teams and channels. This is a foundational requirement for any organization moving toward the **experience-orchestrated business** model¹.

FIGURE 1
CMS Development Authority No Longer Belongs Just to IT



Survey question: "Which teams or departments within your organization are responsible for the technical development or decision-making authority over your CMS?"

Source: IDC's *Content Management System Survey*, June 2024 (N = 105)

"Growing cross-functional ownership of CMS development requires architectures that support flexibility for developers and usability for business stakeholders."

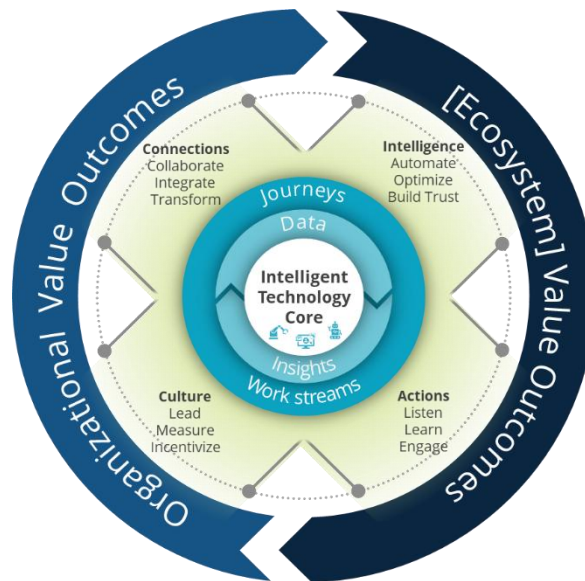
¹ IDC's *Improving Experiential Value and Empathetic Customer Outcomes Through an Experience-Orchestrated Business*, August 2024

The Experience-Orchestrated Business Imperative

The X-O business represents a new class of enterprise: one that delivers **shared experiential value powered by intelligence** (see Figure 2). These businesses integrate data, systems, and teams to orchestrate journeys and automate outcomes across the experience ecosystem — in real time, at scale².

FIGURE 2

Critical Components of the Experience-Orchestrated Business



Source: IDC, 2025

For CIOs and their development teams, this means content platforms must:

- **Activate experience** data through journey-aware orchestration and AI-powered automation
- **Break silos** between systems, enabling fluid collaboration across marketing, IT, and product teams
- **Support trust by design** through first-party data, governance, and transparent personalization
- **Adapt and learn**, with feedback loops that tie delivery outcomes back into planning and optimization

A modern CMS is the operational foundation of this evolution — not just a publishing system, but a central node in a real-time, insight-driven experience stack.

Why CIOs Must Act Now

The market shift is already underway. IDC's global research shows the vast majority of organizations believe generative AI (GenAI) and data-driven insights will impact their business

² IDC's *Improving Experiential Value and Empathetic Customer Outcomes Through an Experience-Orchestrated Business*, August 2024

significantly within the next 18 months³. Yet most also admit they struggle to align AI initiatives with measurable experience outcomes.

Organizations that delay modernization risk falling behind more agile competitors who can:

- Launch new digital experiences faster
- Iterate and personalize in real time
- Leverage AI to optimize both internal workflows and customer engagement
- Turn experience data into actionable insights at every level

This is a strategic inflection point. For IT and development leaders, evolving your CMS strategy is not only about futureproofing content but about enabling your organization to operate as an experience-orchestrated business.

Transforming Experience and Content Delivery in the Digital Age

Modernizing your CMS stack is just the starting point. To fully operate as X-O businesses, organizations must rethink how digital content is created, managed, delivered, and optimized — across every channel, team, and customer touchpoint.

This transformation is about moving from publishing to orchestration; it demands new thinking about technology architecture, developer enablement, and the intersection between IT, marketing, and business operations.

Content Is No Longer Static But Dynamic, Modular, and Programmable

In the X-O business model, content is not an endpoint but an enabler of intelligent, data-rich interactions. To support this, enterprises must embrace:

- **Structured content models** that allow teams to decouple presentation from logic, making content adaptable across devices, regions, languages, and formats
- **Component-based content architectures**, where reusable blocks (e.g., product descriptions, FAQs, and images) can be dynamically assembled and personalized
- **Real-time content delivery pipelines** that feed not only websites but also apps, portals, kiosks, voice assistants, and emerging interfaces

This shift fundamentally changes how developers engage with content. Instead of working around rigid publishing workflows, they can integrate CMSs into their continuous integration (CI) and continuous deployment (CD) pipelines, build with modern JavaScript frameworks (e.g., React, Next.js and Vue.js), and expose content via APIs in context-aware ways.

Developer-Centric Delivery Accelerates Innovation

Empowering development teams is at the heart of modern content delivery. With the right hybrid headless CMS foundation, CIOs can enable their teams to:

³ IDC's *Exploring the Experience-Orchestrated Business Revolution*, May 2024

- **Choose best-fit front-end frameworks** while maintaining centralized content governance
- **Build faster, lighter experiences** through static site generation, server-side rendering, and edge-first deployment models
- **Automate testing, deployment, and rollback** using version-controlled workflows (e.g., Git) and composable infrastructure
- **Integrate content seamlessly** with personalization engines, CDPs, commerce platforms, and custom microservices

This will result in faster iteration cycles, improved performance, and a unified experience architecture that adapts as quickly as the business evolves.

Bridging the Gap Between Strategy and Execution

In many organizations, the experience vision is clear but execution falters. Teams work in silos, insights are fragmented, and content workflows are not designed for agility. This is where experience orchestration comes into play.

By transforming how content is delivered, organizations can:

- **Align technology with business objectives**, using content as a strategic asset across departments
- **Break operational silos**, empowering marketing, product, and development teams to co-create experiences
- **Drive continuous optimization**, with feedback loops that capture user behavior and feed insight-driven improvements

This level of integration is only possible with a CMS architecture designed for change — not one retrofitted for it.

Experience as an Operating Model

At its core, this transformation is not just technical but operational. Content delivery becomes part of a broader system of data, intelligence, and orchestration that defines how the organization functions.

An experience-oriented operating model:

- **Prioritizes collaborative workflows** between technical and business users
- **Leverages real-time data** to adapt content and experiences continuously
- **Encourages experimentation** by decoupling delivery from content creation
- **Aligns IT, marketing, and customer teams** around a shared view of impact

As digital experience becomes a key differentiator, organizations that embed this model will not only deliver faster; they will also learn faster, adapt faster, and win faster.

Empowering Developers: The Backbone of Experience Orchestration

Developers are moving to the center of value creation as businesses embrace the experience-orchestrated model. They are no longer just responsible for building front ends but have become enablers of flexibility, scalability, and speed across the entire digital experience stack.

However, outdated CMS architectures are a major drag on progress. **More than a quarter of surveyed organizations cite legacy technologies (26%) and ongoing maintenance and licensing costs (28%) as top barriers to executing their digital platform strategy⁴**, pulling resources away from innovation and delaying the delivery of new features and functionality.

Developer Velocity Drives Experience Agility

Modern digital delivery requires developers to build faster, integrate smarter, and deploy continuously. That means giving them tools that align with how they work today:

- **Support for modern frameworks** such as React, Next.js, and Vue is essential, as they are among the most widely supported and used by leading CMS platforms evaluated by IDC⁵.
- **API-first and microservices-friendly CMSs** that connect content to any front-end or service layer
- **Agile workflows**, CI/CD pipelines, and component-based design systems that bring agility to content delivery

When developers have this flexibility, they can accelerate innovation while enabling marketing and product teams to work in parallel without stepping on each other.

"Developer velocity powers differentiated digital experiences. With a flexible CMS technology approach, devs move faster, integrate smarter, and deliver the agility needed to deliver stand-out experiences."

Balancing Autonomy and Governance

With hybrid headless CMS platforms, CIOs no longer need to choose between developer freedom and enterprise control. Developers gain the autonomy to ship experiences as code, while business teams benefit from intuitive visual editing capabilities (including real-time previews, drag-and-drop assembly, and structured publishing workflows) and IT retains oversight through governance frameworks, audit trails, and security controls.

This balance is crucial. As digital experience becomes a shared priority across IT, marketing, and customer-facing operations, organizations must foster systems and workflows that support cross-functional collaboration — without creating complexity or chaos.

⁴ IDC's Digital Platform Ecosystem Survey, April 2024

⁵ IDC MarketScape: Worldwide Hybrid Headless Content Management Systems 2023 Vendor Assessment, 2023

Developers as Experience Orchestrators

In an experience-orchestrated business, developers play a strategic role: They not only write code but also shape how content, data, and services come together in real time. With the right CMS architecture, they can:

- **Abstract complexity** and standardize experiences across channels
- **Speed up delivery** with automated deployments and testing
- **Generate continuous insight** through instrumented digital experiences

Empowering developers is more than an IT initiative: It is a business imperative. In the digital age, experience is a product, built by developers.

Escaping the Legacy Trap: The CMS Evolution for Agile, Scalable Experiences

As organizations evolve toward X-O business models, the pressure to modernize legacy CMS infrastructure has reached a breaking point.

Legacy platforms, once positioned as complete, all-in-one solutions, now limit organizations where they most need flexibility. They were built for a browser-centric world, before the rise of mobile-first design, JavaScript frameworks, APIs, or omni-channel delivery. They assume tight coupling between content and presentation and too often require custom development for every new integration, feature, or locale.

This results in slower delivery, bloated maintenance, and fragmented experiences.

Architectural rigidity is the biggest limitation in legacy CMS environments. Organizations often find themselves unable to scale to new channels or teams and reliant on fragile, over-customized deployments that are expensive to maintain.

A CMS Built for Change

To deliver at the speed and scale modern digital business demands, CIOs are turning to hybrid headless and composable CMS architectures — platforms designed not around pages but around reusable content, open APIs, and developer-first tooling.

These modern CMS solutions support:

- **Presentation-agnostic delivery**, decoupling content from the front end and enabling distribution to websites, apps, kiosks, or anything with an API endpoint
- **Composable microservices architectures**, where functionality such as personalization, search, or translation can be added or replaced without replatforming
- **Cloud-native performance**, delivering content at scale via edge caching, CDN integration, and auto-scaling infrastructure

Most critically, these solutions empower developers by enabling teams tasked with digital experience delivery to build, deploy, and iterate using the tools they know best.

Supporting Modern Developer Frameworks: From Limitation to Acceleration

Legacy CMS platforms often impose rigid architectures that conflict with how modern applications are built and delivered. For organizations racing to implement modern digital platforms, these legacy technologies have become a top obstacle, **with over a quarter (26.3%) identifying outdated architectures as a top 3 barrier to progress**⁶. As digital leaders seek to modernize, their priorities are clear: faster rollout of new features, stronger performance, seamless AI integration, and greater security. These are the benefits technology teams most want when re-architecting legacy cloud-based applications, and they are exactly what traditional CMS environments struggle to provide.

In contrast, modern CMS platforms are built to support:

- **Frameworks such as React, Vue, Next.js, and Nuxt** are among the most widely supported by CMS vendors and increasingly preferred by enterprise front-end development teams⁷.
- **Client- and server-side rendering models**, including support for static site generation (SSG), server-side rendering (SSR), and edge rendering
- **Flexible SDKs and open APIs** that allow content to be treated as data, accessible wherever and however developers need to consume it

By embracing these frameworks, organizations can unify design systems, accelerate UI development, and deliver lightning-fast, engaging experiences across devices while keeping content centralized and governed.

The Race to Modernize Experience Applications

The stakes are high. According to IDC research, only 11% of organizations are currently “mature” in their ability to deliver digital experiences that differentiate the brand. Those who lag behind risk being locked into brittle platforms that cannot support personalization, data integration, or AI-infused experiences — all essential components of an X-O business strategy.

Forward-thinking enterprises are already making the shift and doing the following:

- **Decoupling content and front ends** to enable parallel development and faster time to market
- **Consolidating fragmented CMS instances** into a unified platform that supports global scale and governance
- **Integrating content with journey data and orchestration tools**, creating continuous experience delivery systems instead of isolated publishing silos

This is not just about new tooling but about enabling businesses to deliver smarter, faster, and more adaptively than ever before.

⁶ IDC's Digital Platform Ecosystem Survey, April 2024

⁷ IDC MarketScape: Worldwide Hybrid Headless Content Management Systems 2023 Vendor Assessment, 2023

Unlocking Agility: What to Look for in a Next-Gen CMS

A next-generation CMS not only a tool for publishing but also the foundation for scaling experience orchestration across teams, channels, and systems. CIOs and digital leaders should prioritize platforms that accelerate delivery, enable adaptability, and integrate seamlessly into their broader digital architecture.

Based on IDC guidance and developer insights, the following are the must-have capabilities to demand in your next CMS:

- **Composable and API-first by design:** Your CMS should support content as a service via robust REST and GraphQL APIs, event-driven webhooks, and integration-ready SDKs. IDC emphasizes that a microservices-friendly architecture is key in enabling agility, future extensibility, and best-of-breed stack flexibility.
- **Modern framework support for developers:** Next-gen CMS platforms must play natively with the frameworks your teams already use. These include React, Vue, Next.js, Nuxt, and others, which power fast, responsive, and scalable front ends; many enterprise dev teams rely on them today. CMSs that limit framework choice limit developer velocity.
- **Low-code/no-code tools for business users:** Drag-and-drop builders, reusable components, and live previews allow non-technical teams to create, adapt, and publish without bottlenecks. Platforms with structured content governance plus flexible authoring is key in balancing control with speed.
- **Cloud-native and globally scalable:** Look for SaaS-first architecture with built-in CDN, automatic scaling, and multisite/multilingual support. IDC emphasizes that global organizations need CMSs with persistent caching and regional data residency to ensure performance, compliance, and reliability.
- **Interoperability across the experience stack:** A next-gen CMS must integrate smoothly with CDPs, DAMs, analytics, personalization, and commerce platforms. IDC stresses the importance of open APIs and prebuilt connectors to reduce custom code and accelerate orchestration across digital systems.
- **Built-in AI and automation readiness:** AI is quickly becoming essential for personalization, content enrichment, and journey optimization. IDC forecasts rapid growth in AI-powered content systems and recommends CMS platforms that support GenAI augmentation and automated workflows.

The Bottom Line

Your CMS should never slow your teams down; it should amplify them. Choosing the right next-gen platform is a foundational move toward becoming an experience-orchestrated business: agile, connected, and built to scale.

Conclusion

The journey to becoming an experience-orchestrated business is now a strategic imperative. This report explores how leading organizations are moving beyond legacy CMS platforms to embrace modern architectures that empower developer teams, accelerate delivery, and orchestrate exceptional experiences across every touchpoint.

In this report, IDC shows that:

- Legacy CMS platforms are too rigid to support today's experience demands.
- Composable, hybrid headless CMSs unlock speed, flexibility, and scalability.
- Developers play a central role in orchestrating experience, and they need tools that support their frameworks, workflows, and autonomy.
- Content must evolve from static output to a dynamic, programmable asset — powering intelligent omni-channel engagement.

Storyblok seeks to enable this shift. With its component-based architecture, native support for modern frameworks such as React, Vue, and Next.js, and visual editing tools for marketers, Storyblok positions itself as a bridge between technical flexibility and business usability. It is focused on empowering developers to build faster and content teams to create independently while ensuring consistency, governance, and performance at scale.

As enterprises seek to align digital investments with real-time experience outcomes, the CMS is no longer a back-office system but the foundation for growth. To the extent that Storyblok continues to solve the challenges outlined in this paper, it is well-positioned in a market increasingly defined by speed, personalization, and experience value.

In this new era, agility is a competitive advantage — starting with the CMS.

MESSAGE FROM THE SPONSOR

Content Infrastructure Enabling Business Agility

The pressure to deliver seamless, personalized, and scalable digital experiences is reshaping how enterprises think about content — not just as an output but as an operational asset. As this report makes clear, legacy systems can no longer meet the demands of real-time, omni-channel engagement. The shift toward modern, developer-first architectures reflects a broader transformation: Content infrastructure is becoming a strategic enabler of business agility.

At Storyblok, we've seen firsthand how development teams are leading this change. They're being asked not only to build faster but also to architect systems that support experimentation, governance, and collaboration — all while integrating with an ever-growing ecosystem of tools and channels. That's why the future of content management isn't just headless: It's composable, flexible, and deeply attuned to how developers actually work.

We believe this is a defining moment for digital experience delivery. Organizations that invest in modern content foundations today will be better positioned to adapt, scale, and lead tomorrow.

About the Analyst



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James McCormick leads IDC's worldwide research on persuasive content and digital experience technologies, with a focus on content production and management and the dynamic delivery of digital experiences.

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