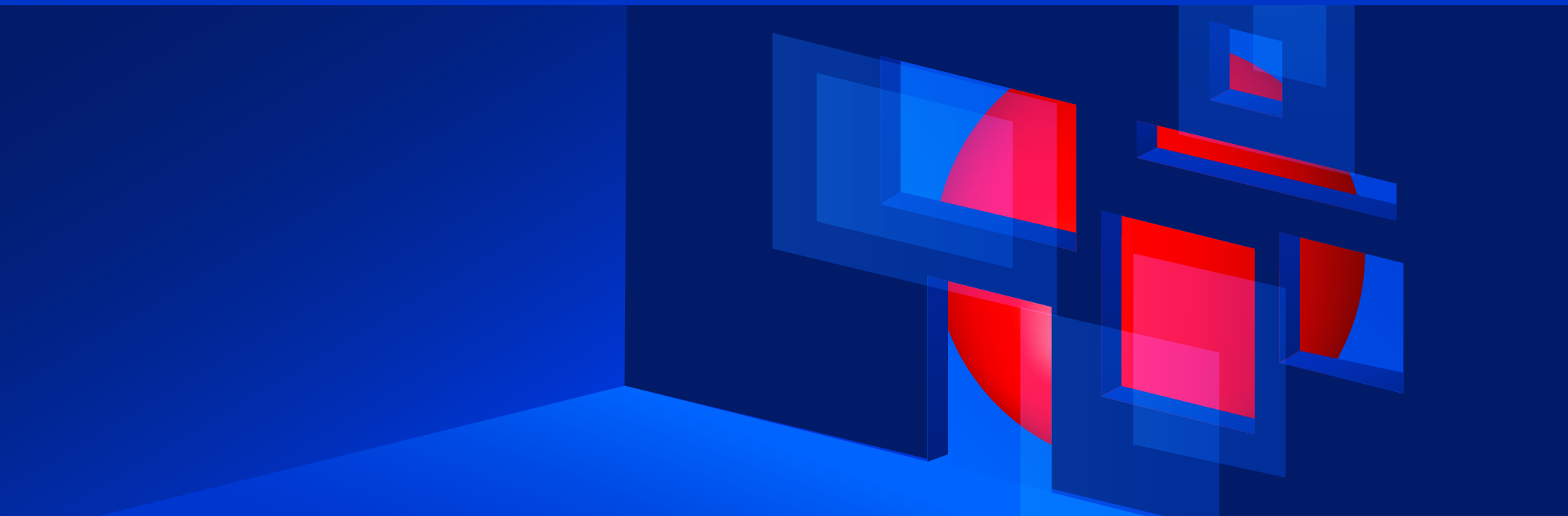




The hidden cost of the status quo

How composable strategies reduce retention and spur innovation





To win, the future must be flexible

To outpace the competition, chief experience officers (CXOs) must continually drive change with digital tools that accelerate time to market and deliver value. However, blocking CXOs' path toward future-ready technology stacks are inflexible and underused legacy systems that have effectively locked team potential in a digital time capsule.

Shrinking budgets, costly replatforming

CXOs must contend with the high cost of hiring agencies and top talent when transitioning to a modern stack. Since technical teams are already strained, CXOs cannot allocate the resources necessary for maintaining critical systems while building the replacement for a switchover.

Difficulties in hiring and retaining talent

To effectively use monolithic systems, developers must possess specialized expertise on all the components. However, recruiting outstanding talent to code in legacy programming languages is challenging, impeding implementation schedules and processes.

Missed business targets

Winning customers requires adapting experiences to fast-moving trends and consumer demands, but aligning digital properties with new priorities and shifting strategies call for extensive coding, causing lengthy delays.



All-in-one vendors

During the early days of software development, single, massive content management systems (CMSes) called **monoliths** were the norm, handling everything from user interface to business logic and databases. As websites evolved from static brochures to more interactive experiences, CMSes followed suit with all-in-one solutions (now known as legacy systems) that featured robust functionality ranging from analytics to visual editors.

Despite their hefty price tag, monoliths offer the convenience of prepackaged capabilities from a single vendor—an appealing option in a crowded market. You deal with one contract and one vendor only for questions and technical support. Though their features might not be cutting-edge, traditional platforms offer a self-contained, predictable, and stable ecosystem, albeit only for the short term.

The failed promise of all-in-one solutions

Much like old engines that lack the horsepower to traverse modern roadways, monoliths are difficult to maintain and scale as they age. Unsurprisingly, brands that migrate from a monolithic architecture to a faster, more adaptable stack do so because of the following reasons:

- **Inflexibility.** Essential upgrades to resolve issues, such as security vulnerabilities, not only require comprehensive testing that can take months to complete, they're also costly. Furthermore, capabilities not offered by the vendor need third-party add-ons or new applications, which developers must build themselves.
- **Vendor lock-in.** As closed systems, monoliths contain features that are glued together and, thus, inseparable. Modernizing your infrastructure requires a "big bang" replatforming every few years, making adaptability a struggle.
- **Derailed innovation.** Because developers are limited by custom code, technical teams have few resources for experimenting with or implementing solutions through the latest innovations. Marketers might gain authoring tools that simplify editing and publishing tasks, but developers are held back by the vendor's proprietary technology and roadmap.

The cons of all-in-ones far outweigh the pros

What's more, monoliths are expensive. According to an Ecommerce Platforms Report, online merchants expect to spend up to [\\$500,000](#) in replatforming costs during 2023. To capitalize on that, large vendors with vast resources and favorable reputations make aging monoliths appear viable to less savvy buyers. As impressive as their presentations and demos might be, the underlying architecture is often outdated and less than ideal for creating data-driven digital experiences. Forward-thinking companies want modern architectures that offer flexibility, longevity, and faster implementation to help achieve digital transformation in an environment where consumer demands are constantly changing. To accomplish that, switching from monolith to composable is the right approach.

Navigating the digital-experience architecture landscape

Driven by the demand for agility, scalability, and fast development cycles, omnichannel has ushered in a new era of digital-experience architectures. The COVID pandemic and market uncertainty have only accelerated those trends, spurring brands to increase spending on their digital properties.

Nevertheless, choosing the right approach for future-proofing a technology stack can be daunting. With the explosion of digital platforms, companies must navigate myriad vendor options and setups.

In addition to the legacy monolith, brands have the choice between one or a combination of the following approaches for building digital experiences:

Software suite

Not to be confused with legacy monoliths, suite vendors build or purchase products that are integrated into their core platform. Despite their modern capabilities, suite technologies are based on a monolithic architecture and tend to shy away from integrating outside their ecosystem. Examples are Adobe Experience Manager and recent versions of Sitecore offerings.

Headless

Headless tools, which apply to decoupled architectures, separate presentation (the head) from the underlying (headless) technologies.

MACH

MACH stands for **m**icroservices, **A**PI-first, **c**loud-based, and **h**eadless. Notably, products built the MACH way meet brand requirements for performance, scalability, and flexibility. However, not all headless vendors are MACH-certified, and not all architectures built with MACH technologies are composable.

Composable

Composable means that your digital-experience stack comprises packaged business capabilities (PBCs), each of which features one or more technologies that you can add or replace without changing the architecture. In a composable architecture, all systems are decoupled, offering maximum flexibility for switching functionality or updating designs.



Headless versus composable: What's the difference?

Though relying on each other, headless and composable are not interchangeable. Here's how they differ:

Headless

The agility and flexibility of composable architecture are enabled by decoupled or headless, API-first services: CMSes, commerce, digital asset management (DAM), personalization. Headless products store, manage, and deliver content with the front end separated from the content or presentation layer, i.e., the "head." One caveat is that since headless products cannot display content in channels, you can create webpages but cannot build them with a headless CMS.

Composable

Composable architecture is a design pattern of reusable components, enabling you to easily assemble, modify, and reassemble the headless tools in your stack. As business needs change, you can plug in and swap out headless elements without replatforming. However, unlike the headless products purchased from vendors, you must build composable architecture yourself.



Combining headless and composable yields flexibility, incremental adoption, and a superior digital experience. Still, incorporating the right tools is just the first step. **You must also invest in content operations and system processes, and develop an organizational mindset.**



Composed doesn't equal composable

All too often, brands that move from legacy systems to a vendor-agnostic stack expect a composable architecture but end up with a composed solution instead. Some composed solutions come in the form of prepackaged capabilities—effectively all-in-one suites that have co-opted “composable” and “headless” terminology and practices.

However, composed can also comprise composable systems that work together through low-value glue code only. In that case, instead of offering flexibility and agility as composable does, composed silo teams, increase bottlenecks, and complicate workflows.

Conversely, with composable, organizations can select and combine functional modules from different platforms with minimal coding, facilitating the workflows of marketers and business users. Composable differs from composed in that businesses must balance the needs of business and technical teams to adopt new technologies so that marketers can create experiences without developer assistance. In return, developers are freed from the chore of integrating composable elements and can work with the front-end frameworks they prefer.



Beware of the composed MACH monolith

The composed MACH monolith is another hurdle businesses face when transitioning from monolith to composable. Though a composed MACH monolith uses MACH-certified technologies for CMSes, DAM, and other best-of-need solutions in a headless, API-first manner, those technologies are hardwired together with glue code. What started as one or two connected systems quickly becomes complex and unsustainable as integrations multiply. Developer-centric with little focus on the business-user experience, companies become stuck with an in-between version of the legacy-suite approach and the new composable way of designing architectures.



Why composable is the way forward

In the quest to balance team and customer expectations, more brands are leaving behind outdated systems for composable solutions that prioritize modularity, flexibility, and user empowerment. A global survey revealed that 85 percent of respondents from companies with 5,000 or more employees use microservices, a clear shift from single-vendor platforms to modular architectures.

And for good reason: Through composability, brands can break free of rigid solutions that waste money, time, and effort, switching instead to features that promote maximum agility and speed to market.

Key advantages

Flexibility	You choose the tools that best serve your needs.
Best-of-need approach	Instead of settling for a monolithic system's prepackaged capabilities, you adopt the solutions of your choice.
Experimentation	You test new tools, vendors, and frameworks in an environment in which it's easy and intuitive to integrate or update technologies.
Scalability	Your digital stack can grow as the business expands.
Multivendor environment	Free from the constraints of a single system, you—not the vendor—are in control of the tools that power your customer experience.

Common pitfalls to avoid

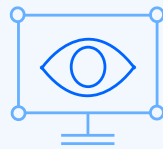
Despite their many benefits, composable solutions have inherent drawbacks that impact various teams.

- **Complex and slow multi-service stack:** Developers must learn the APIs and write and maintain the integration logic for numerous systems, leading to tech debt.
- **Poor resource allocation:** Technical teams are stuck modifying and publishing pages instead of working on value-added projects.
- **Reduced productivity and unhappy employees:** Business teams are disengaged and disempowered by developer-centric tools while technical teams are bogged down by mundane coding tasks.
- **Rising costs and snowballing replatforming woes:** As the number of composable tools connected by glue code increases, so do the cost and time required to replace them with best-of-breed solutions.

Visual workspace delivers next-generation consumer experiences

To reap the full rewards of composable, brands need a self-service, visual workspace where teams can generate high-performance experiences out of the box. Working in a low-code or no-code environment, marketers can create and publish digital experiences from multiple content and data sources independently and at speed.

Running alongside headless systems, that workspace seamlessly combines composable, disparate technologies into a cutting-edge and highly adaptable stack by means of three components:



A visual workspace for marketers to independently build and customize web and application experiences through connected content sources.



Out-of-the-box tools and integrations for building data-driven experiences, including conversion rate optimization (CRO) and account-based marketing (ABM) campaigns, without copying and pasting.



Fastest time to market and true composability, which enable you to add to your stack and innovate without replatforming.

Benefits of visual workspaces

Unlike monolithic systems, which can hold back the teams that use them, a visual workspace offer marketers and business users notable benefits:

Agility

With composable multivendor tools, business teams can seamlessly create digital experiences by orchestrating their tech stack without custom coding from developers

Compatibility

Business teams can quickly build digital experiences, and developers work faster in a composable environment with the tools of their choice.

Sustainability

Maintaining a long-term tech stack is easier because of the elimination of integration needs

Affordability

It's easy to add, change, and remove solutions in the team workflow without incurring the time, effort, and costs associated with replatforming.

Availability

Thanks to the elimination of integration needs and the availability of a low-code or no-code environment for business teams, technologies become more feasible for small and mid-size organizations that lack extensive technical resources

With Uniform, you can—

- Orchestrate composable tools.
- Personalize digital experiences.
- Enable advanced API connections.
- Create omnichannel experiences.
- Run A/B tests in a low-code or no-code environment.

[Learn more in a demo](#)



About Uniform

Uniform is a versatile platform on which businesses can efficiently build high-performing and compelling digital experiences. By offering a consistent visual layer for content orchestration in any channel, Uniform gives business users, such as marketing and e-commerce teams, the ability to build experiences quickly and test ideas with no need for developer support. Also, prebuilt integrations eliminate the need for custom code to connect content sources, such as legacy DXPs, customer data platforms, and headless services. Businesses can then deliver projects faster and at lower cost while retaining long-term flexibility for innovation.

In addition, Uniform delivers content, including personalized content, directly to the edge of modern CDNs.

Customers that have adopted Uniform include Cobham Satcom, Sunweb, and Triumph.

Learn more at uniform.dev and follow us on [LinkedIn](#) and [X](#).