

# Perfecting Digital Experiences with Composability

## A DEEP DIVE INTO ADOBE AEM'S COMPOSABLE ECOSYSTEM

There's a lot that goes into creating a digital experience today. It requires consistency, personalization across several channels, and the ability to adapt to changing customer behaviour and market conditions quickly.

Unfortunately, many businesses are restricted by monolithic tech solutions that create technical debt and lock users into an inflexible environment. As a result, these brands find their ability to deliver these digital experiences limited, particularly at the pace modern customers expect.

A composable architecture allows organizations to future-proof their tech stack, choose the best tools for their business needs, and use a modular approach to deliver experiences faster.

At Content Bloom, we're familiar with what businesses need to do to meet customer demands. In this eBook, we'll perform a deep dive into Adobe AEM's composable ecosystem and explain:

- The rise of composable DXPs
- The build vs. buy dilemma
- How Adobe AEM supports composability

# The Rise of Composable DXPs: What Is a Composable Ecosystem?

Today's businesses need to cope with the demands of modern consumers, an increasing number of digital tools and channels, and the acceleration of digitization. However, it's become impossible to meet these business objectives or the needs of the market with legacy systems.

45% of consumers switched to digital channels due to the pandemic, but 43% have chosen digital channels due to greater convenience and availability compared to other options.

- McKinsey Digital

Instead, businesses have had to undergo digital transformations at break-neck speeds and embrace new approaches and technologies to hit the mark, and composable DXPs have risen in response to those needs.

Before diving into composable DXPs and ecosystems, it's essential to understand what composability means. Composability is an architectural principle for designing systems with independent but interrelated business functions. A composable system enables components to be assembled in a variety of combinations to fit a business' specific requirements.

A composable DXP is a digital experience platform that is assembled from different best-of-breed solutions and used to create and manage digital experiences across numerous digital touchpoints. These best-of-breed solutions are connected via APIs and rely on a microservices architecture that can be deployed, scaled, and replaced independently of each other and the rest of the software platform.

## Modern Businesses Are Opting for a Composable Approach

In the past, business leaders designing a technology stack would have opted for a monolithic all-in-one suite that contained almost every software tool an enterprise business could want. However, overreliance on one system can cause challenges which are difficult to overcome, such as difficulty integrating with tools outside of the suite, hence the emergence of composable DXPs. Here are some of the reasons modern businesses are adopting a composable approach:

### **Best of Breed Selectivity**

A composable DXP allows you to choose the best tool for your business requirements. Monolithic platforms limit you to what is available as part of the suite. However, if you need another digital asset management or CRM solution, you can swap out your existing tool for the best option on the market.

### **Integration Flexibility**

Legacy suites or custom-built solutions can be difficult to integrate with new tools and technologies. In today's fast-paced environment, businesses need to be able to easily incorporate different pieces into their technology stack. Composable DXPs enable this through flexible APIs.

### **Better Customizability**

A composable approach allows you more customizability for your technology stack. It doesn't place restrictions on what you can integrate with, allowing you to create the ecosystem that is best suited to your business.

## **Build vs. Buy: The Enterprise Technology Stack Dilemma**

Enterprises have long debated the best approach for investing in their technology stacks. The build vs. buy dilemma has plagued several organizations, and in the modern software environment where speed is essential, the choice becomes even more difficult.

Traditionally, the decision to build in-house vs. purchasing software from a vendor was determined by how much control the business would have. Purchasing software could save on IT resources, but the tools might not be tailored to a business's specific requirements. However, while opting to build in-house can enable companies to tailor software precisely to their requirements, it can also leave businesses with a legacy software platform that is difficult to upgrade or replace and slows down significantly as the years go on and technology advances.

A composable platform solves these problems, but it leaves businesses with another decision to make about the foundation they choose for their composable DXP. Opting for a headless CMS can provide the ultimate choice of flexibility and freedom, but too much freedom can come at a cost. Alternatively, a built-for-you ecosystem can enable a similar amount of flexibility with fewer drawbacks.

## The Drawbacks of Building a Composable DXP from Scratch

Headless CMS platforms are the primary option for building a composable DXP from scratch. Decoupling the frontend layer from the backend content repository allows the CMS to provide more freedom to the developers building the frontend experience that customers receive. These two layers can be connected using APIs, and these APIs can also be used to connect to other software systems in the tech stack.

### Extended Buying Process

Composable DXPs grew in popularity because they can help businesses be more agile under quickly changing market conditions where digital transformation must occur just as fast. However, a headless CMS only offers one piece of the puzzle for the composable DXP. You still need to research, demo and implement every other tool in your ecosystem.

Small organizations that only need a handful of tools may enjoy this approach. Still, for an enterprise business that needs to modernize tens of software tools, this can extend the buying process for the entire tech stack from a few months to multiple years.

## Developer Dependency

A company choosing to develop a custom-built system with a headless CMS at the core might find itself following the latest frontend development trends like Jamstack. After all, a headless CMS allows developers the freedom to embrace the latest frameworks. These modern technologies can be beneficial, but they also leave you dependent on your developers to build and maintain the ecosystem. If your developer is unavailable or leaves, you may find yourself stuck with a highly bespoke code base that only certain types of developers can understand.

In addition, many headless CMS platforms make you reliant on developers to create the frontend experiences for various channels. This means that when marketers are ready to roll out their latest campaigns, they may find themselves stuck waiting for assistance from the IT department before they can proceed.

## Higher Total Cost of Ownership

Enterprise businesses generally have several tools that they rely on. When you have to purchase each tool in your tech stack separately, you could run into a higher total cost of ownership after paying for the enterprise implementation for all of those tools.

## Steep Learning Curve for Less Technical Team Members

Headless CMS platforms were built for developers by developers. As a result, many of them don't have user-friendly features that marketers and other less technical team members may be familiar with. Team members will need to spend additional time getting acquainted with the tool before they can use it effectively, or they'll have to call the IT department to assist with even simple tasks like editing a page on the website.

“Having the right DXP is crucial to keeping up with customer expectations and creating personalized experiences. Adobe’s suite of tools can provide everything your business needs to meet your digital goals.”

- Tayo Olayinka, Content Bloom

## **Why Enterprises Trust Adobe AEM's Built-For-You Composable Ecosystem**

Adobe AEM provides an alternative to the headless CMS for a composable DXP. Here's why leading enterprises prefer it as the foundation for a composable ecosystem.

### **A Collection of Modern Tools**

Adobe doesn't only provide a content management system, but it combines it with the power of a digital asset management solution as well. Plus, the suite of products includes other tools essential for a modern enterprise, including Adobe Analytics, Adobe Commerce, and more, that can streamline the building of a complete technology stack.

### **Faster Time to Market**

With a built-for-you ecosystem, like Adobe AEM, you don't have to worry about the stress and time spent building a platform from scratch. Instead, you can use enterprise-grade tools trusted by Fortune 500s to execute ROI-positive projects and tasks sooner.

### **Familiar Interface**

A headless CMS has a steep learning curve that marketers may struggle to use to create engaging digital experiences. On the other hand, Adobe AEM features marketing-friendly templates and interfaces that marketers are accustomed to and don't take long to learn.



## How Adobe AEM Supports Composability

Adobe's approach is different from built-from-scratch headless CMS systems. Here's how it supports composability and provides all the benefits:

### APIs

Adobe Experience Manager (AEM) provides [several APIs and SDKs](#) for developing applications and extending the platform. They include the AEM Single-Page Application (SPA) Editor SDK framework, delivery and content management APIs and more. Adobe AEM is an [API-first content and asset management platform](#) and can provide the same freedom and flexibility modern businesses get with a headless CMS. It also features a GraphQL API that makes content delivery more efficient if developers require the option.

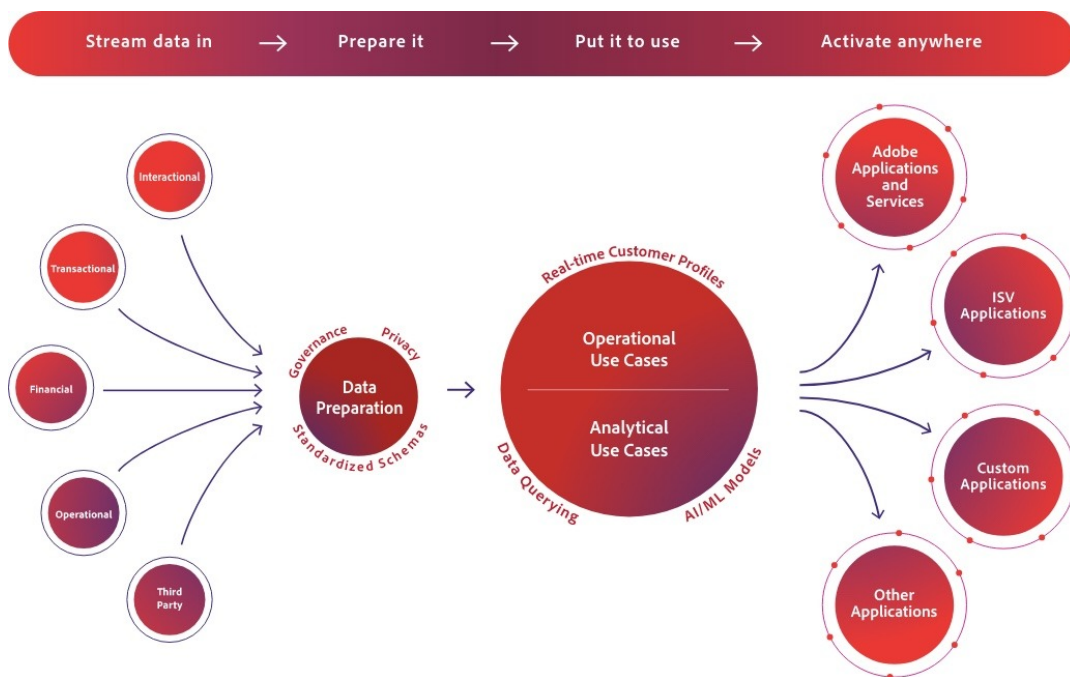
### Out-the-box Tools and Integrations

Adobe AEM features several out-of-the-box tools and integrations that make it easier to start building a composable ecosystem. In addition to Adobe Commerce, Analytics and Forms, enterprises can easily integrate with [third-party services](#) like email marketing tools, social networks, sales and CRM software, video sharing tools, and more that help to improve the digital experience.

## Expanding Adobe AEM's Composable Ecosystem

With the concept of microservices growing in popularity, Adobe sought to break a sizeable monolithic suite into tiny manageable chunks to provide increased agility. Acquisitions of Magento, now Adobe Commerce, collaboration tool Workfront, and other partner tools have helped Adobe make the shift to composability that modern businesses desire.

Adobe continues to acquire new tools and services rapidly, treating each of them as separate services. These cloud-based systems provide the agility that modern businesses require and help form a strong foundation for a composable DXP.



Powered by customer data, Adobe continues to assess different demographics and locations and will continue to consider additional tools and new technologies. Artificial intelligence and machine learning have already begun to improve the vast number of tools within the Adobe suite of products, allowing businesses the knowledge to choose the best solution to fit their needs and construct engaging digital experiences.

## Content Bloom & Adobe AEM: Combining Experience with Forward-thinking Strategy

Adobe AEM is a leader among digital experience platforms and has the ecosystem to help make adopting a composable approach much more manageable. It provides the ideal foundational infrastructure for expanding a technology stack as the business scales.

Content Bloom is an enterprise digital consultancy that can help businesses address the evolution of content management and digital experiences. We sit at the bleeding edge of innovation, working with leading technologies across the [headless CMS and composable DXP spectrum](#) – so clients will always end up with the solution that's truly best for them.

We offer a host of services that can help you get more out of AEM and start your composable DXP journey:

- Your business will have its own requirements for software development, even if you use AEM as your starting point. We can provide a [custom software development approach](#) that fits your needs, rather than just going for what's out-the-box.
- When it's time to opt out of your current CMS solution and choose a modern approach, our [CMS migration services](#) enable you to adopt new technologies seamlessly and avoid post-migration issues.
- Enterprise content management expertise allows you to create and manage your digital experience needs. Our data-driven [digital marketing](#) strategies can help you stay top of mind for your audience.

If you're interested in learning more about Adobe AEM, see how you can start [Forging Customer Connections with a DXP: Adobe AEM](#). Otherwise, don't hesitate to [contact us](#) to get started on your composable ecosystem today.

## **About Content Bloom**

Since 2011, Content Bloom has been implementing content managed solutions to create everything from web and mobile sites through to digital products and online marketing campaigns.

### **Creativity, technology, and digital marketing**

Our expertise is a unique blend of creativity, strategy, and technology that accelerates digital performance, delivering value that exceeds our clients' expectations.

### **Delivering results that matter**

Our expertly trained team of consultants, developers, designers, and engineers have amassed many years of experience developing enterprise solutions around the globe.

Our extensive experience ensures the highest quality deliverables throughout your project.

By focusing on quality, we've exceeded our clients' expectations and have enjoyed mutually beneficial, long-standing partnerships built on trust.

<http://www.contentbloom.com>