

Content management for *everyone*.

Why a hybrid CMS makes it easier for marketers and IT.



Creating great experiences requires great content *management.*

Every day, every moment, brands compete fiercely for their customers' attention. They must compete not only against their closest competitors, but also against almost any distraction — social media, notifications, or the lure of an intriguing headline.

Morningstar, a digital leader of financial information, knows this all too well. "Our customers view finance as vitally important but not always exciting," says Rob Pinkerton, CMO at Morningstar, Inc.

Yet it's imperative Morningstar finds a way to capture its customers' attention. "It's important for us to push digital and invigorate our brand with fantastic client experiences," says Pinkerton.

One of the ways that Morningstar differentiates its content is by using design to make information easier to understand. This includes creating large-scale animations and motion graphics for presentations or events, such as when Morningstar was invited to ring the NASDAQ opening bell.

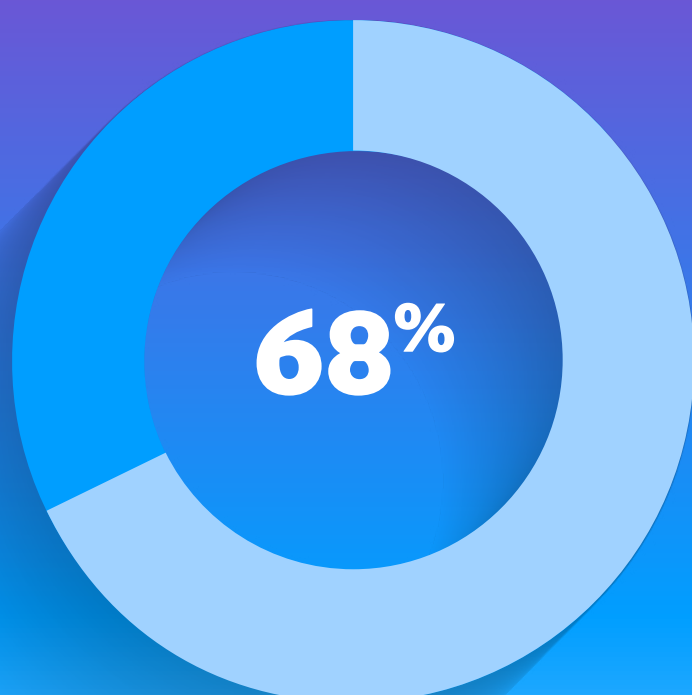
To create these engaging, multi-media experiences, Morningstar relies on a content management system (CMS). However, creating content efficiently was a struggle with their legacy CMS. “We used to require a lot of support from the development team,” says James McClamroch, senior vice president of individual investor software at Morningstar.

As they looked to replace their legacy CMS, Morningstar wanted a solution that would allow both their marketing and communications teams as well as their IT team to get content out faster while powering custom experiences for different types of media, channels, and devices.



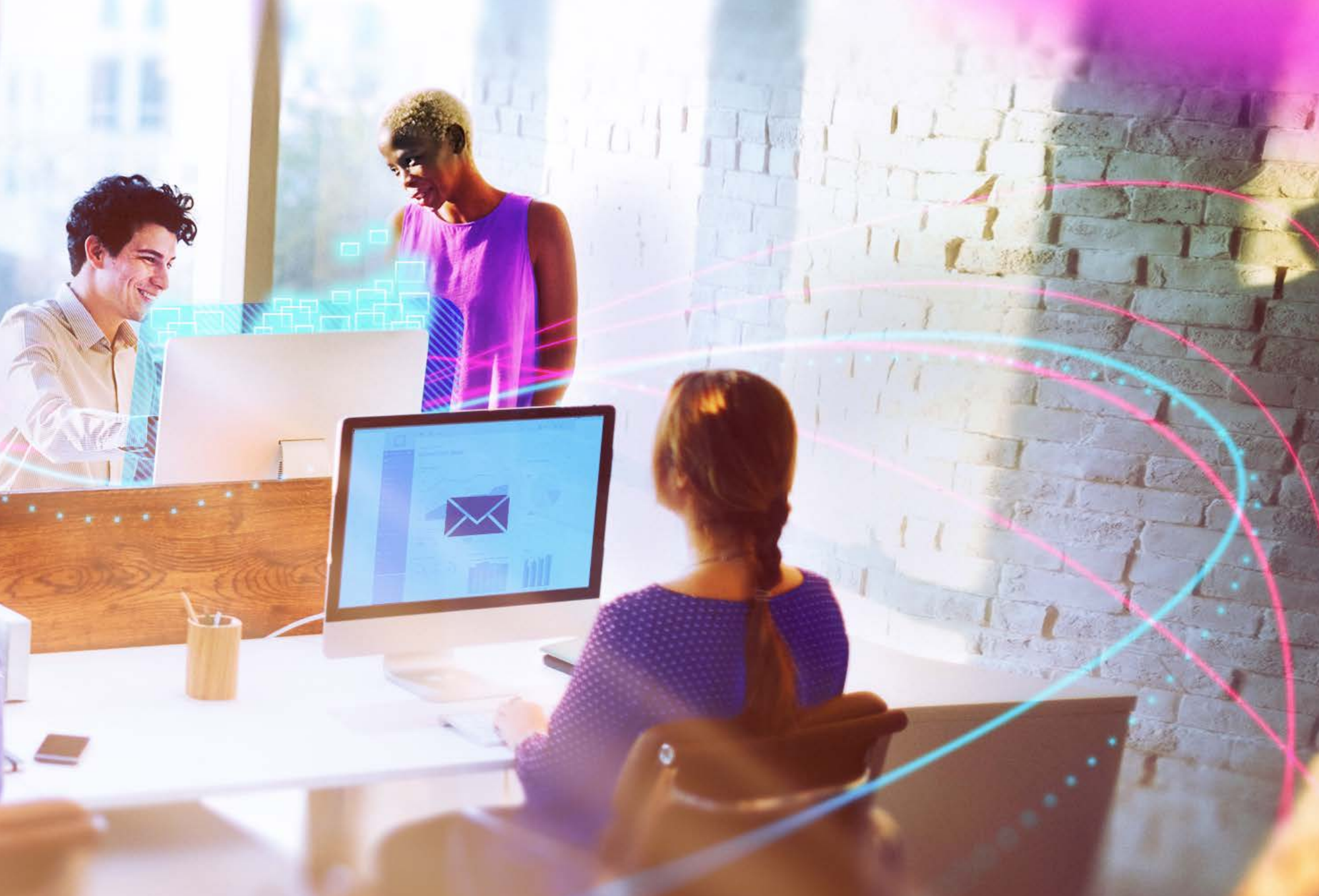
“Risk is always an issue in a regulated environment. Some companies will avoid changes to avoid risk, but we want to be innovators.”

Rob Pinkerton
CMO, Morningstar



68% of businesses say delivering personalized experiences is a priority.

Source: Forrester



Searching for the right *CMS*.

For companies like Morningstar, who are looking to replace their legacy CMS with something more effective and efficient, the process can be daunting. Not only is it a complicated and crowded space with multiple types of CMS technologies to choose from — coupled, decoupled, headless, or hybrid — there is confusion around what these different CMS architectures do and why one would be better than another.

To help you better understand the choices out there, let's take a brief look at the difference between these CMS architectures:

Coupled CMS

In a coupled or traditional CMS architecture, the content management system, where content is created, is “coupled” with the system that delivers or publishes the content.

Blogging platforms such as Wordpress or Squarespace are examples of a coupled CMS where the authoring capabilities are part the of live delivery system. The benefit of a coupled system is that it is easy to set up and deploy for a single instance, such as a website, and it doesn’t require users to have much technical or coding expertise. The drawback, however, is that a coupled infrastructure is more complex to scale, migrate, or integrate, limiting developer’s ability to push content out to third-party applications, such as IoT-connected devices.

Decoupled CMS

A decoupled system separates the authoring and delivery into two disconnected applications and sometimes even different infrastructures. To publish, content is pushed from the underlying content repository to a content delivery infrastructure. This gives the organization greater flexibility — marketers can create content and developers can focus on coding. The downside to a decoupled approach is that once a delivery system is selected, the publishing capabilities are limited to that delivery system.

Headless CMS

A headless CMS architecture decouples the content and presentation just like a decoupled CMS, but unlike a decoupled CMS, it doesn't limit the publishing capabilities of the CMS. What makes a headless CMS most appealing is that it eliminates the difficulty of reusing content on multiple channels. Developers have the flexibility to use any front-end framework and develop custom customer experiences — whether that's for a website, a single-page application, virtual reality, or the Internet of Things.

Yet the capability to easily reuse content in any coding language comes at a cost in both headless and decoupled content management systems. Without the user-friendly structure of templates found in a coupled CMS, non-technical business users, such as creative and marketing teams, cannot easily create and publish content on their own. This can make content creation costlier and slow down the process — limiting how nimble companies can be at pushing out content to their customers.

Hybrid CMS

A hybrid CMS combines both a coupled and headless approach to content management. With a hybrid approach, developers have the freedom to build and customize on any front-end framework by using RestFul APIs and Content Services, much as they would in a headless environment. At the same time, a hybrid CMS lets you use templates to author and publish content — just as you would in a coupled CMS architecture.

A hybrid CMS also accelerates the building of responsive websites by providing developers with the HTML Template Language (HTL). For dynamic forms, developers can use a visual tool that helps easily connect the structured data fields to back-end databases like CRMs. Yet for non-technical users, a hybrid CMS allows for authoring an experience in one channel such as mobile web while easily creating and publishing variations for channels like Facebook or Pinterest.



Why a hybrid CMS delivers the best of both *worlds*.

The reality for most brands is that a complete digital experience management solution needs to include the tools and resources to make the experience easy for both marketers and developers. For example, the Franke Group, a global provider of products and solutions for home kitchens and bathrooms, had a requirement that their CMS would allow its 150 distributed online writers and editors to be able to manage and orchestrate content, such as 3D assets, images, video clips, and so on, without any special technical expertise — like a coupled CMS offers.

At the same time, Franke also wanted the ability to customize their content presentation to different channels and devices to create an immersive digital showroom experience for customers that they could share with friends and family at home or on social media. But creating these types of experiences efficiently requires the flexibility of a headless CMS.

A hybrid CMS makes both scenarios possible. With a hybrid CMS, you have the flexibility to create your own or use pre-built templates and to make that same content available and easily reusable across any channel or device and in any coding language through the use of APIs.

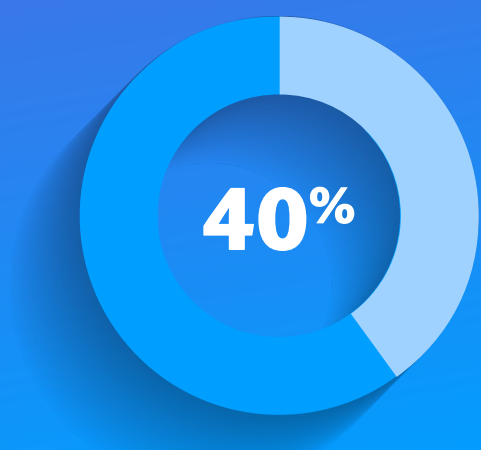
By having these dual capabilities, companies like Franke and Morningstar not only improve their ability to create engaging content, they improve their agility in doing so. Currently, Franke is able to roll out 8 to 10 new country-specific web properties each month. What's more, instead of just working with classic page templates, they can create three-dimensional sketches of their products or of an entire kitchen design. And this added customization is paying off, as visitors are spending 40 percent more time on their sites — all because the customer experience has improved.

Top three benefits of a hybrid CMS.

Marketers	IT
1. Easily author content	1. Easily reuse content across any end point
2. Simplified content and theme management across multiple brands	2. Simplified integration with back-end applications
3. Centralized content repository with smart tags to speed content discovery	3. Cloud-based infrastructure for greater scalability

Hybrid CMS drives real results.

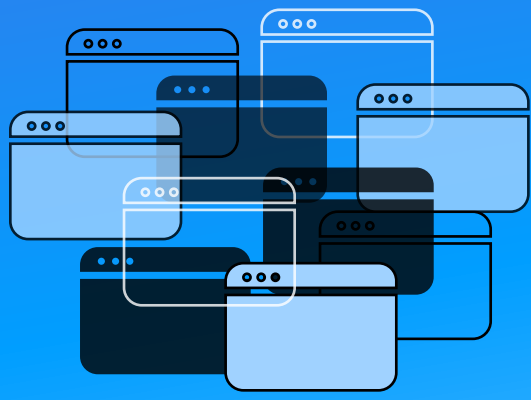
Using a hybrid CMS, Franke saw returns like these:



*40% increase in
time spent on
website*



*15% reduction in
churn rate*



*8–10 new local web
properties rolled out to
new markets per month*

Adobe Experience Manager — more experiences with less *effort*.

While the ways to reach a customer or audience continue to grow, the core message of engagement must remain true, no matter what the channel. This means that the CMS must be able to manage content in a way that makes it easier to render content on any channel while minimizing bottlenecks and fostering collaboration among business and IT users. Adobe Experience Manager, a hybrid CMS, not only has these key capabilities, but it offers additional functionality that can enhance the discovery, management, personalization, delivery, and performance of the experiences you create.

As a hybrid solution, Adobe Experience Manager allows marketers and IT to design, understand, and rapidly deliver experiences in context across web, mobile, and any end point in the customer journey — giving businesses the ability to address headless use cases while also solving its challenges. Experience Manager's hybrid approach also means that it's easy to quickly create and manage context-optimized experiences. This lets you deliver consistent connected experiences, scaling content reuse and delivery as the business grows.

The Adobe difference.

Digital experience goals	How Adobe Experience Manager helps
Optimize the delivery of rich media.	<ul style="list-style-type: none">• Delivers dynamic images and interactive content by channel or viewer context
Deliver experiences across channels.	<ul style="list-style-type: none">• Provides line-of-business applications for composing and continually managing experiences at scale• Supplies core set of fully customizable components and tools to make it easy for developers to introduce new functionality
Enable business users to create and manage experiences for partner sites where the CMS contributes only content or part of the presentation.	<ul style="list-style-type: none">• Allows content and experience fragments layout and context for different applications• Includes real-time targeting for personalization
Create and access a rich, contextual content feed.	<ul style="list-style-type: none">• Can customize line of business• Offers contextual content feed• Implements digital asset management
Access raw content.	<ul style="list-style-type: none">• Allows base content repository to be accessed or exported• Can use APIs to connect raw content to various publication platforms

Rapid content creation for everyone.

As Morningstar is well aware, delivering content rapidly is essential to the customer experience. “Our goal is to help people get better information faster,” says Pinkerton.

To ensure marketers can quickly create content, Adobe Experience Manager offers a unified interface and drag-and-drop tools that allow non-technical users to author an experience for one channel, such as mobile web, as well as create variations for additional channels, like Facebook or Pinterest. As content updates occur, they traverse through all channels to ensure a consistent customer experience. In a hybrid environment, these same experiences can be easily reused by developers for customized experiences like single-page applications and Internet of Things.



“Our process and productivity has increased 40-fold. On the old platform, restructuring content would have taken a team two weeks.”

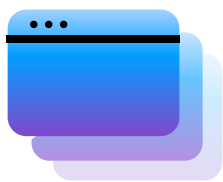
Dave DeMaria

Corporate Vice President,
Corporate Marketing, Synopsys

The right content for the right context.

Another critical component of content management that Adobe Experience Manager addresses is ensuring that the content you deliver is right for the channel, device, or customer you're delivering it to. For example, authors should be able to create fragments of content and experiences once and then publish them to any application. At UBS, the marketing and communications team was able to detect each employee's location, job profile, and role. Using this information, they could enhance productivity by tailoring news based on what was relevant to specific employees' needs.

Reusing content across different experiences.



Content fragments

Design, create, curate and use page-independent editorial text content with embedded or associated media



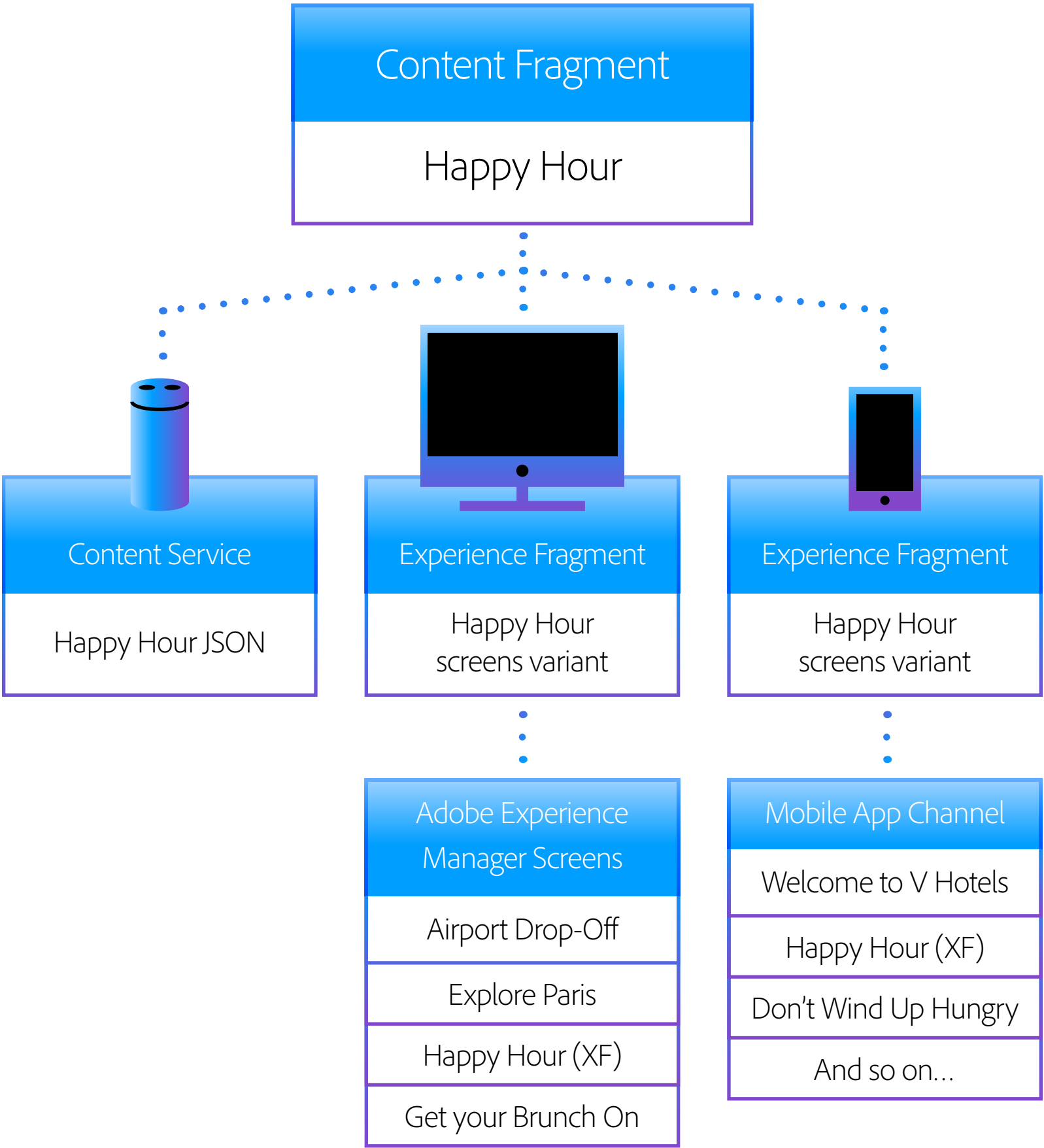
Experience fragments

A group of components with layout that can live independently



Content services

A lightweight, read-only way for accessing content (e.g., JSON) from Adobe Experience Manager to deliver to any channel



Source: Adobe

One piece of content, multiple experiences.

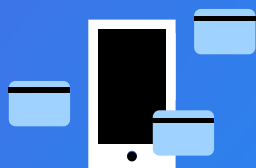
With a hybrid CMS, you can apply content and experience fragments to a broad set of experiences, including the following:



Point-of-sale and other in-store experiences, such as magic mirrors, electronic shelf labels, virtual shopping windows, and kiosks



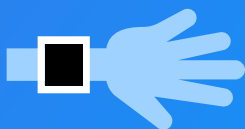
Off-site digital experiences such as affiliate networks, partners' marketplaces, and social networks



Connected devices such as smartphones and tablets and associated apps



Internet of Things apps in smart cities, smart homes, and fleet updates



Specialized wearables, such as smart watches and fitness trackers



Call-center agents, chatbots, and gaming platforms



Web and mobile sites



Dynamic forms and customer correspondence



Customer communities such as forums or social media

Content driven by intelligence.

To increase the effectiveness of the experiences you deliver, Adobe Experience Manager goes beyond typical hybrid capabilities to intelligently adapt content creation as needed for different channels, devices, or even customers. Using artificial intelligence and machine learning, dynamic tag management can simplify the process of tagging web pages so that you don't need to rely on IT resources to tag or make changes to the content. This was true for Informatica, whose complex website environment made tagging critical. With dynamic tag management, Informatica gained flexible metadata control and reporting to identify content by type, product, solution, industry, and strategic value.

Similarly, smart tags, which use image recognition software, allow you to automatically create keywords for photographs, making it easy to quickly discover, manage, and create content. Finally, using AI-driven content summarization, you can receive recommendations for content variations based on optimal word count for different devices, such as a wearable device or a tablet — enhancing the personalization, delivery, and performance of the experiences you create.



“After classifying content with tags in Experience Manager, we can use [Adobe] Target to better deliver the right content to our key accounts.”

Sean Browne

Senior Director of Web Marketing,
Informatica

Scale your content to scale your business.

As a cloud-hosted hybrid CMS, Adobe Experience Manager can further enhance your agility in creating content by making it quick and easy to scale experiences. This improves the speed and personalization of content delivered to specific campaigns, sites, or regions. For UBS, scalability was key, and Experience Manager made this possible by allowing them to reuse many components — buttons, form fields, and graphics — without duplicate effort. Additionally, with a cloud solution, you can easily connect to other Adobe cloud services, allowing you to source content from these services and stream user-generated content — improving not only the speed at which you can deliver the most relevant content, but also allowing you to deepen the personalization of that content.



“The Adobe Experience Cloud solutions delivers all of the tools that we need to transform our digital experience and prepare us for new markets.”

Dave DeMaria

Corporate Vice President,
Corporate Marketing, Synopsys

Content management simple enough for *everyone*.

In their search for the right CMS, leading-edge companies like Morningstar, Franke, UBS, Informatica, and Synopsys all discovered that they needed both a headless and a “head-full” approach to content management. By deploying Adobe Experience Manager, a cloud-based hybrid CMS, these companies not only get their content out the door faster, they’re also able to deliver and scale the type of highly personalized, custom experiences on any channel or device that drive customer engagement. But deploying a hybrid CMS isn’t just about the competitive edge and rich and fluid experiences it can deliver today, it’s also about being ready for the future — and whatever new devices or channels may appear on the horizon.



How Adobe can help.

Adobe Experience Manager is an agile hybrid content and experience management solution that makes it easy for marketers and IT to create, manage, and deliver experiences across the customer journey. Your marketing and creative teams will be empowered to streamline experience creation, eliminate technology silos, and continuously deliver personalized and relevant content. At the same time, IT and developers can rapidly customize and reuse content across diverse endpoints to create consistent experiences across all channels, devices, and digital touchpoints.

To learn more, visit www.adobe.com/go/contentmanagement or www.adobe.com/go/aem.

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Jennifer Wise and Andrew Hogan, "Pivot to Person-First Personalization," Forrester, April 6, 2017.

"[The Big Data Advantage \(Informatica\)](#)," Adobe Customer Story, February 2017.

"[UBS, Delivering Superb Customer and Employee Experiences Online](#)," Adobe Customer Story, October 2016.



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