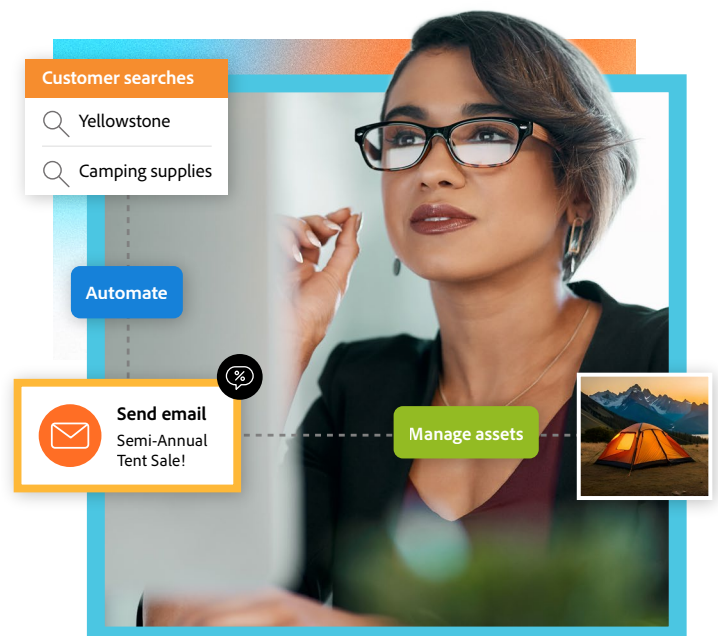


From endless aisles to limitless personalized content.

Adobe and IBM have teamed up to help retailers transform their content supply chains with AI.

Retail has entered an age of unprecedented personalization. Experiences that were really innovative a few years ago are now commonplace. For example, a shopper wouldn't think twice if they received an email coupon for a grocery staple they're almost out of—or if they were greeted by a text message with personalized product recommendations as they entered a store.

Both consumers and retailers agree this hyper-personalization is a good thing. [In a study conducted by Forrester and commissioned by Adobe](#) that surveyed both consumers and retail marketing leaders, more than half of consumers (53%) said they value personalized promotions most. Meanwhile, retail leaders said that their personalization programs are exceeding expectations across multiple metrics, including revenue (68%), conversion rates (68%), and customer experience (63%).



However, as the demand for more tailored retail experiences grows, so does the demand for content. To reach every customer through every digital and physical touchpoint and at every stage of their journey, retailers must create thousands or even millions of content assets. And the delivery of this content must now be fully integrated across digital and physical channels to ensure a seamless experience.

According to Brett Wachter, EMEA marketing technology consulting leader for IBM, “How much content your supply chain can assemble and how quickly you can build it is now crucial to the success or failure of your retail personalization efforts overall.”

75%

75% of CEOs believe that competitive advantage will depend on who has the most advanced generative AI.

Meet the AI-powered content supply chain.

A new generation of disruptive technologies—including AI and generative AI, which combines humanlike creativity with high-speed cloud computing—promises to help brands speed up and scale content production. Already, C-suite leaders are ready to invest in them. According to new research from [IBM's Institute for Business Value CEO study](#), 75% of CEOs believe that competitive advantage will depend on who has the most advanced generative AI.

This quick guide will explain how Adobe and IBM are partnering to help retailers build AI-powered content supply chains that connect the people, tools, and workstreams needed to effectively plan, create, manage, deliver, and measure content.

The retail content explosion.

Shoppers are consuming more digital content than ever and this trend shows no signs of slowing. “According to our research, content demands have doubled in the last two years and more than half of the retailers we spoke to anticipate demand to grow 5x by the end of 2024,” said Bruce Richards, the retail industry strategy and marketing lead for Adobe.

Three powerful forces continue to fuel the demand for retail content:

- 1. Complex customer journeys:** These journeys are less linear, more complex, and involve more touchpoints than ever before. Brands can now reach consumers on more than 300 digital touchpoints, including marketplaces, social media, influencer-owned channels, and more. This means retailers need content that’s customized for each and every touchpoint. The more touchpoints, the more content development is required.
- 2. Personalized experiences:** Retailers are targeting increasingly small segments or even individual consumers. Today, 63% of them use a customer data platform to build highly granular customer profiles. Personalization is only as good as the underlying data. Retailers can generate stunning amounts of data as shoppers interact with content and offers.

Of course, the more you personalize experiences, the more variants of key content you need. Content that must be customized includes: ads, emails, flyers, instructions, offers, product descriptions, signage, search results, social media posts, and more. And many retailers are optimizing this content on a weekly or daily basis—further increasing the demand for new assets.

- 3. The new digital store:** Physical stores are becoming more connected to digital channels. Facial recognition and even gait recognition technologies can identify shoppers as they interact with store environments. Shoppers can then receive personalized offers and messages with personalized content.

Data-driven product assortment also means stores are more frequently changing their offerings and updating related content.

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Retail Industry Strategy and Marketing Lead
Adobe

Anatomy of a highly efficient content supply chain.

A truly modern content supply chain—especially when it incorporates generative AI and other emerging technologies—will help brands accomplish four things:



Increase content velocity



Improve content relevance



Enable real-time content distribution



Manage content production costs

1. Increase content velocity.

Content production remains a highly fragmented and manual process for many retailers. The content workflow typically takes 8 to 12+ weeks to produce (for original 2D content) and requires multiple handoffs and approvals across 5+ teams (campaign strategy, photography, design, copy, merchant approvers, retouching, legal, etc). It's often a bottleneck and streamlining the process can drive 10–15% efficiencies, freeing up resources to produce more content for personalization. Typical challenges include lack of visibility into project status and delays, inability to find assets stored in multiple repositories, high percentage of content waste, time spent on manual rote tasks, and siloed teams and technology.

Retailers can accelerate content velocity by:

- Mapping out their content supply chain and defining clear roles, responsibilities, and processes
- Tracking and managing tasks and projects in a work management solution. Adobe Workfront is integrated with creative/design tools (Creative Cloud) and an enterprise DAM (AEM Assets). This integration allows creatives a single place to manage and execute their content tasks natively within their design tools.
- Making it easier to find existing content that could be quickly modified by using a DAM like Adobe Experience Manager Assets that automatically tags assets with metadata as they are added to the system
- Adopting AI/ML to automate repetitive, low-value, time-consuming content creation tasks, allowing teams to focus on creativity
- Building content in a modular approach, that can be automatically assembled into fully personalized experiences across various platforms, devices, and audiences



How AI can play a role.

Generative AI such as Adobe Firefly can help human creators be more productive by producing photorealistic images and copy blocks in response to simple text prompts and automatically creating thousands of personalized variations of content like ads, landing pages, etc. Generative AI tools such as Firefly may be able to source and assemble content modules on the fly to create unique product pages, social posts, and more. Firefly is the world's first copilot in creative and design workflows giving users magical new ways to work.

IBM uses watsonx™—its enterprise platform for data and AI—to empower enterprises to train, tune, and deploy AI across the business, leveraging critical, trusted data wherever it resides. The platform is open for model variety and, in the marketing domain, gives strategists, creators, and digital production and analysis teams a leg up in creating the most relevant and impactful brand content.

2. Improve content relevance.

Quality content speaks directly to audiences and individuals and inspires them to take action. Irrelevant content, on the other hand, can prompt them to tune out and opt out. Retailers can end up producing suboptimal content when they don't measure content performance by different customer segments and feed it into the content planning process.

Enabling this kind of content measurement requires a few things:

- Content must be tagged with relevant metadata/attributes so you can see how certain content attributes drive lift
- Rich customer data that captures how a shopper interacts with content, and whether that leads to a purchase
- A way to easily measure how different content performs with specific customer segments

This may require tapping into many different systems, such as Adobe Commerce, Adobe Customer Journey Analytics, Adobe Experience Manager, Adobe Target, your POS system, and more.

Retailers should also make content performance reports that attribute engagement and sales to specific content assets available to teams responsible for content planning.



How AI can play a role.

Alexis Zamkow, the Intelligent Marketing lead for IBM Consulting, identified three ways AI can support the development of relevant content. "First, it can rapidly summarize performance data and identify the highest-performing content for different audiences. Next, it can predict which types of content are most likely to be effective for different segments and in different contexts and create customized outputs. Finally, it can improve ecommerce search results so they are more relevant and actionable."

3. Enable real-time content distribution.

Every retail interaction, whether it happens online or in store, should trigger personalized, content-driven experiences. For example, ordering a flashlight could trigger a coupon for batteries. But this doesn't happen if content can't be instantly connected to shopper behaviors.

Retailers can enable real-time content delivery by ensuring they can collect and stream customer event data. Very advanced organizations are designing content modules that can be assembled into experiences in real time. Making this work requires developing extensive metadata for content and ensuring each new asset is accurately tagged as soon as it enters the digital asset management (DAM) system.

How AI can play a role.

"AI could make split-second decisions about which content to display and how to assemble content modules based on customer, segment, and content performance data," said Richards. He noted that eventually AI may be able to predict the next step in a shopper's journey and assemble relevant content seconds before it's needed.

"Training solutions like watsonx with specific datasets can ensure any content built on the fly taps into both a retailer's customer's behavior as well as associated product offerings and services from the brand," added Wachter.

4. Manage content-related costs.

Reimagining processes and adding automation to increase content velocity will usually drive content production costs down. To reduce costs further, marketers may want to reconsider their approach to the very earliest stages of the creative planning and ideation process. The time and labor required to communicate ideas to agencies and bring new campaigns to market is often an overlooked source of content-related costs. Generative AI has many promising applications in this area.

How AI can play a role.

AI can help human creators quickly create photorealistic mockups that can inform creative briefs and jump-start brainstorming sessions, getting projects off to a faster and less costly start. Today's generative AI can rapidly develop numerous creative concepts based on customer, product, and campaign parameters—but humans should ensure supervision before publishing.

Adobe and IBM Consulting: Building an AI-powered content supply chain.

By pairing [Adobe's AI-accelerated content supply chain solution](#) and IBM Consulting services, retailers can adopt AI to improve their content supply chains in ways that are effective—and responsible. “We believe retailers that are first to add AI to their content supply chains will have a lasting competitive advantage,” said Adobe’s Richards.

As part of this expanded partnership, Adobe’s enterprise customers will have access to IBM Consulting experts, including 21,000 data, AI, and experience consultants, who can help them effectively implement generative AI solutions for the design and creative process.

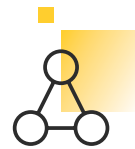
Examples of these solutions include:



Adobe Firefly, which is initially focused on the generation of images and text effects



Adobe Sensei GenAI services, a copilot for marketers embedded across Adobe’s enterprise applications for simplifying marketing workflows to increase productivity



IBM’s watsonx, which can help enterprises train and tune machine learning models on trusted data and content sources, scale experiences, and govern the use of content and assets

“We’re seeing incredible momentum in AI adoption as more brands turn to generative AI to create seamless and highly personalized customer experiences to drive growth and improve productivity,” said Matt Candy, global managing partner for generative AI with IBM Consulting. “By expanding our strategic partnership with Adobe, we can help marketers more effectively design AI-powered experiences while establishing appropriate guardrails, so the AI is built on trust and transparency principles to promote brand consistency and integrity.”

“Both Adobe and IBM are pioneers in the thoughtful development of AI and its application to a wide range of enterprise business challenges,” said Olivia Kwon Best, general manager for retail and consumer goods with Adobe’s Digital Strategy Group. “This partnership will make it easier for our customers to quickly start using AI to accelerate their content supply chains and spend less time on costly, repetitive work.”

Take the next step.

AI is already disrupting how consumers experience shopping and shaping their expectations. Truly individualized, one-to-one experiences—powered by hyper-personalized content—could soon become the new normal. Retailers that embrace the power of AI and generative AI to enhance every stage of the content supply chain—from ideation to creation to real-time delivery—will be well-positioned to succeed in this new world.

But the challenge for many brands is getting there from here. If this is something you're wondering about, Adobe and IBM can help.



About IBM Consulting's AI capabilities.

IBM Consulting is the catalyst for business transformation. With deep industry expertise spanning strategy, experience design, technology, and operations, we have become the trusted partner to over 3,000 of the world's most innovative and valuable companies. We enhance the impact of AI and cloud technologies in business transformation by working across our own IBM watsonx technology and an open ecosystem of partners to deliver any AI model, on any cloud, guided by ethics and trust. Global enterprises rely on IBM Consulting as a partner for their AI transformation journeys. Supported by IBM Garage, our proven co-creation method, we bring speed and scale to innovation with an enduring ecosystem of technology leaders to deliver solutions for some of the world's most complex challenges. We collaborate closely, ideate freely, and apply breakthrough innovations that drive sustainable change and re-invent how business gets done. Find out more at: [IBM.com/consulting](https://ibm.com/consulting)

About Adobe's AI capabilities.

Adobe is making the world more creative, productive, and personalized with AI as a copilot that amplifies human ingenuity. For decades, Adobe has delivered hundreds of intelligent capabilities across Adobe Creative Cloud, Document Cloud, and Experience Cloud through Adobe Sensei, enabling customers to create, work, and collaborate more efficiently.

Firefly, Adobe's family of creative generative AI models, brings even more precision, power, speed, and ease directly into Adobe workflows. It is the most differentiated generative AI offering in the market, trained on a unique dataset that generates commercially viable, professional-quality content.

Adobe Sensei GenAI services are redefining how businesses deliver customer experiences by delivering more speed and productivity across Adobe Experience Cloud workflows. Sensei GenAI will enable brands to instantly generate and modify text-based experiences across any customer touchpoint and leverage different large language models. These innovations are anchored in Adobe Experience Platform, which brings customer data and content together across an organization under one common language model.

As a trusted partner to individuals and businesses of all sizes, Adobe develops and deploys all AI capabilities with a customer-centric approach and according to its AI Ethics principles to ensure content and data transparency. Content Credentials provide "nutrition labels" for digital content and are a key pillar of Adobe's AI principles.

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