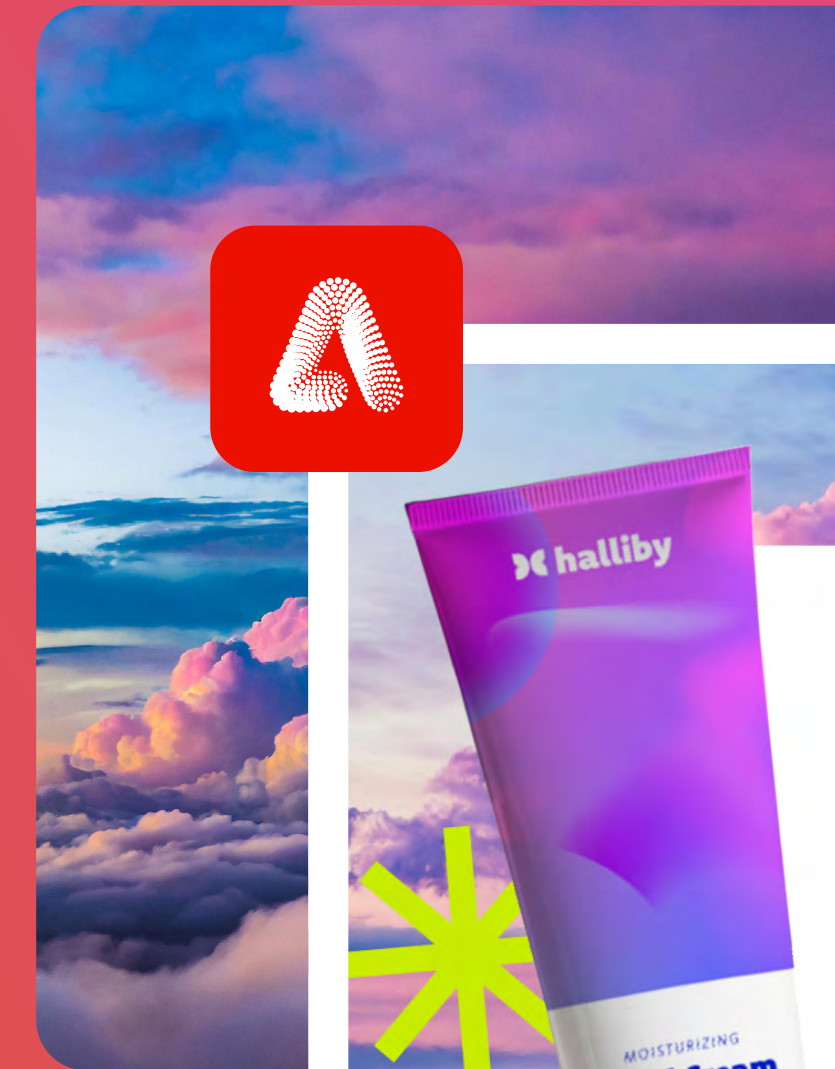
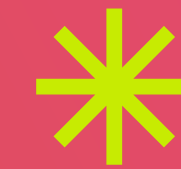


PRODUCT GUIDE

Adobe Firefly Services

Drive speed and scale with generative AI-powered workflows.

Adobe



Aa



a scene of bright blue, pink and purple clouds reflecting on water

Generate



Scale creativity with generative AI.

Businesses are facing explosive content needs and skyrocketing costs fueled by digital transformation. Highly skilled creatives are at capacity, yet most of their time is spent on tedious, low-value work. Marketing teams are unable to react quickly and truly personalize. Agency budgets are eaten up by the production of derivative assets. Operations teams struggle to scale while maintaining quality. Even an HR department might spend countless hours adding the same background to thousands of employee headshots.

Content demand is expected to grow between **5x and **20x** over the next two years.**

Source: Adobe

44% of creatives spend more than half of their time on repetitive tasks, such as resizing assets.

Source: Adobe, Edelman Data & Intelligence, and Havas Play

The revolutionary power of generative AI empowers businesses to confront these challenges head-on. Firefly Services is a new solution that infuses creative workflows with generative AI, ramping up speed while reducing the cost of producing high-quality, on-brand content. This guide explains how you can revolutionize your approach to content production with Firefly Services.

A vast amount of content is needed to power marketing today.

Let's consider a company aiming to amplify sales of a beauty product offering through a spring marketing campaign. They have a beauty line with 4 products, each of which requires 10 unique hero assets. The company needs to adapt all 40 hero images to 15 different size variations across multiple digital channels, totaling 600 assets. With a global footprint spanning 25 markets, localization becomes key. Swapping out backgrounds and editing language for each of these 600 assets now represents 15,000 variations.

With Firefly Services, these teams can edit, duplicate, and customize all of those assets simultaneously, at a massive scale, freeing them to dedicate their time to the high-value creative and strategic work that drives a successful campaign rather than the routine and mundane tasks that can keep that campaign stuck in a frustrating production bottleneck.



4 products

× 10 unique
hero assets



40 hero assets

× 15 size
variations



600 channel variations

× 25
markets



15,000 localized versions

Introducing Adobe Firefly Services.

Meet Firefly Services, your solution for seamless content production at scale. Firefly Services is a complete suite of generative AI and Creative Cloud APIs designed to streamline workflows and speed up creative work. These APIs can integrate across workflows, empowering teams across the organization to create content and stay on brand without depending on studio or agency support.

- 1 **Eliminate repetitive tasks.** From removing backgrounds to cropping images, allow Firefly to shoulder production tasks that slow down creative workflows.
- 2 **Produce unlimited variations.** Combine multiple actions together at once, enabling you to generate thousands of unique variations of your project.
- 3 **Integrate into any workflow.** Pair with other Adobe apps and services to streamline the entire workflow—from model customization to review and approval to final edits.
- 4 **Maintain quality control.** Firefly Services assets preserve file formats and can be easily edited in Adobe apps, saving teams time when renditions need to be modified.

Create with confidence.

Not all generative AI is created equal. Firefly Services generative APIs are powered by Adobe Firefly, a new family of creative generative AI models and services integrated into Adobe's flagship apps. With Adobe Firefly, you can rest assured that your organization's content is:

- **Designed to be safe for business.** Firefly is trained on licensed and public domain content where copyright has expired and developed to mitigate bias.
- **Indemnified.** Firefly is trained on 375M+ high-resolution Adobe Stock assets. Enterprise plans offer IP indemnification on select Firefly workflows.*
- **Ethical.** Adobe develops its AI models using the principles of responsibility, accountability, and transparency.
- **High quality.** Experience the depth and breadth of the highest-quality AI models.

* Opportunity to obtain an IP indemnity from Adobe for content generated by select workflows powered by Firefly under certain Adobe offers. Terms will apply.

Top Firefly Services APIs.

20+ generative APIs and industry-standard image editing capabilities.

Our collection of APIs is extensive. Our Firefly APIs are the headless version of many of the generative AI features we've embedded into our flagship apps. Firefly APIs can be combined with our Photoshop and Lightroom APIs, which allow you to offload a lot of repetitive tasks such as removing backgrounds, creating masks, and cropping images.



Text to Image generates images based on prompts as well as your style parameters.



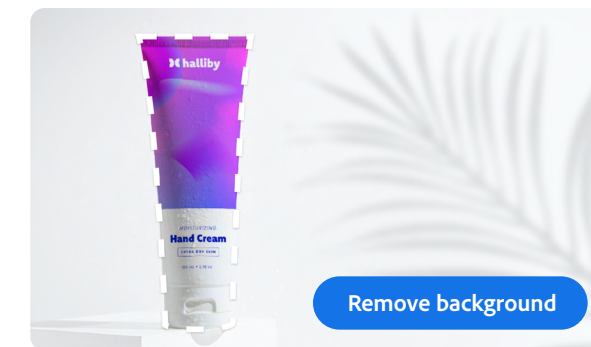
Generative Match uses images as a style reference to create similar images that match your brand's look and feel.



Generative Fill adds and removes elements and replaces backgrounds within images.



Generative Expand API resizes an image to a different dimension, generating areas that weren't in the original version.



Remove Background removes backgrounds from product images or portraits.



Photoshop Actions API automates actions you create in Photoshop.



Product Crop API crops product images to highlight the product or main subject.



Create Mask API dynamically creates masks to help inform tools, like Generative Fill API, how to generate new content or remove backgrounds.

**Supercharge your creativity:
Explore key Firefly Services
use cases.**

FIREFLY SERVICES USE CASE

Localize campaigns and assets.

The challenge

Studio or agency teams spend countless hours creating thousands of renditions to localize assets for global campaigns.

How we're solving it

Connect with customers across regions by programmatically creating dozens of localized variations in bulk, stringing together a series of generative and creative APIs.

Business impact



Save hours in finding and resizing geo-specific imagery.



Expand market reach by localizing to a wider number of geographic locations.

1

Create Mask API isolates the product in the original image.



2

Generative Fill API generates region-specific backgrounds.



3

Generative Expand API resizes images for different channels.



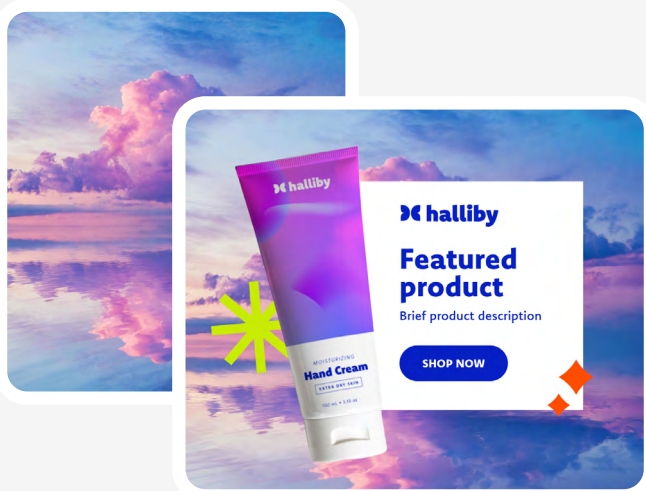
4

Replace SmartObject API changes product colors.



5

Photoshop Actions API adds panels, applies text, and assembles the renditions.



As needed, seamlessly edit generated outputs directly in Creative Cloud or Adobe Express.

FIREFLY SERVICES USE CASE

Personalize campaigns and assets.

The challenge

Creating the large volume of variations needed for true personalization today is a highly manual and costly process.

How we're solving it

Drive personalization at scale by creating asset variations to target all relevant segments, journeys, and channels.

Business impact



Increase customer engagement with personalized assets.



Reduce time to source and edit segment-specific imagery.



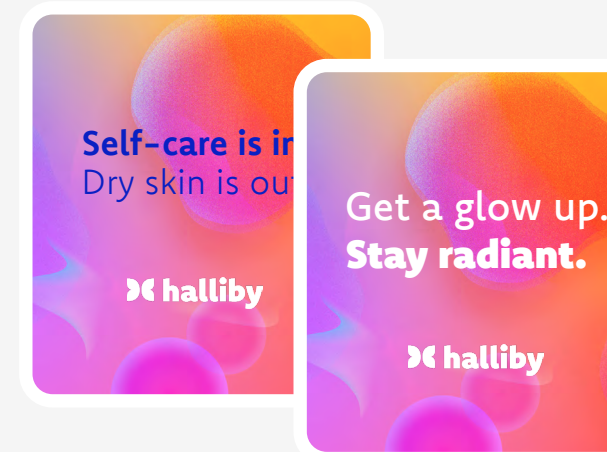
1

Text to Image API generates imagery specific to key segments.



2

Generative Expand API resizes images to a template size.



3

Edit Text Layers API allows you to add segment-specific text to each variant.

Integrating APIs into workflow and asset management tools makes it easy to review, approve, store, and tag content.

FIREFLY SERVICES USE CASE

Accelerate digital merchandising.

The challenge

Digital merchandising requires compelling product staging refreshed seasonally or even more frequently. Creative, marketing, and operations teams often lack capacity.

How we're solving it

Turbocharge digital merchandising with Firefly Services to quickly create and refresh composite images for the entire product portfolio.

Business impact



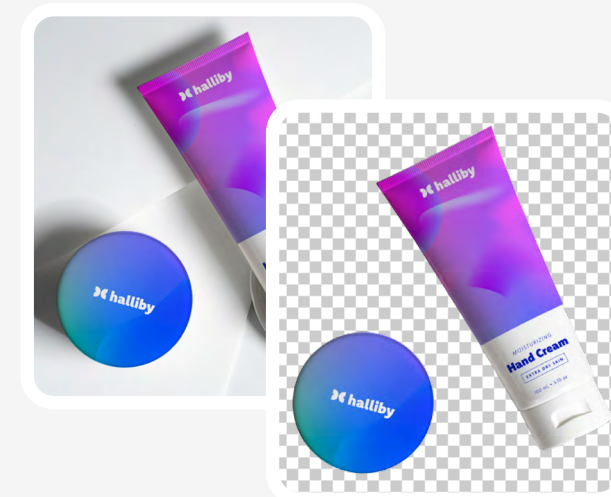
Drive revenue via more effective merchandising across channels.



Establish repeatable, automatic workflows to streamline creative operations and accelerate digital merchandising.

1

Remove Background API to dynamically remove image backgrounds.



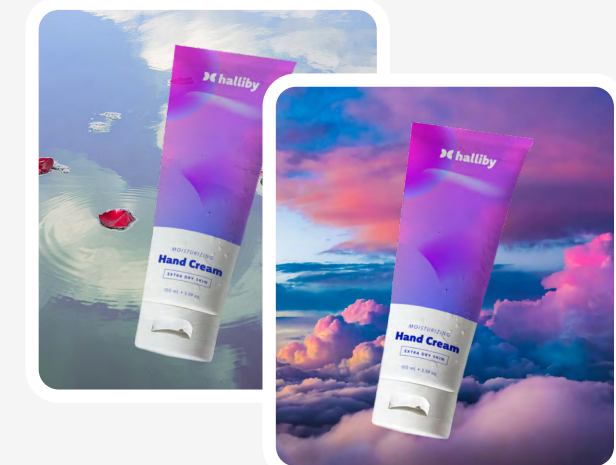
2

Auto Straighten API to level an object to set in a scene.



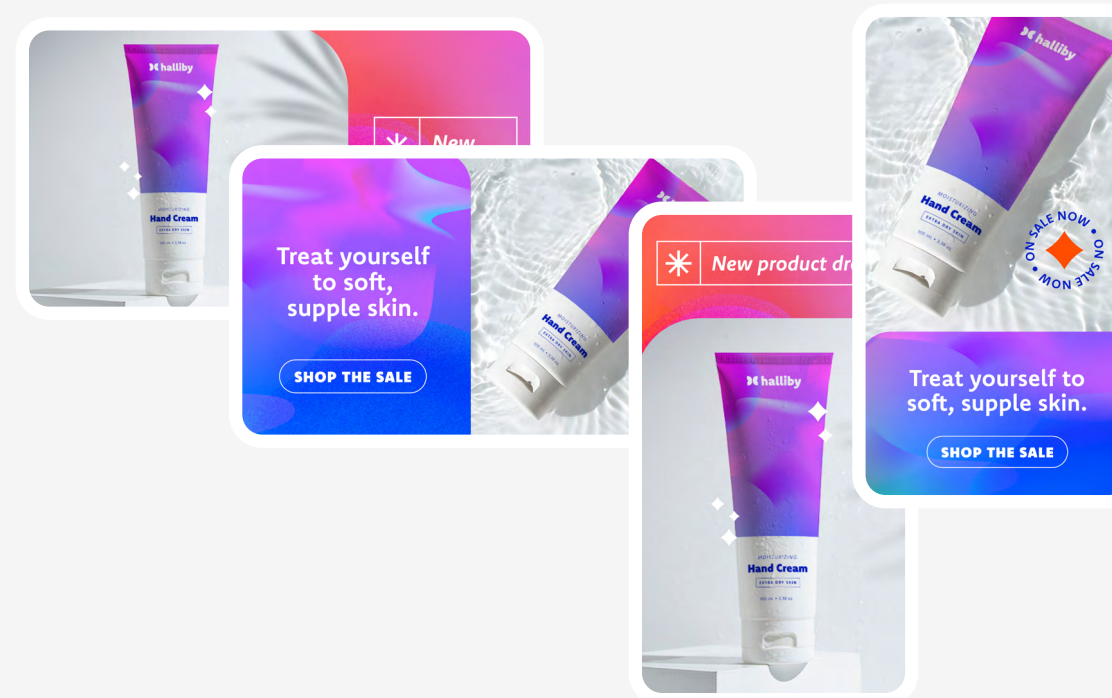
3

Generative Fill API to generate unique seasonal backgrounds.



4

Photoshop Actions API to assemble the elements into multiple variants.



Integrate APIs with asset management and activation systems for real-time delivery.

FIREFLY SERVICES USE CASE

Reduce the cost of photo shoots and postproduction.

The challenge

Companies spend extensively on photo shoots to ensure content helps “sell” their products and reflects their brand.

Subsequently, creative teams spend countless hours applying basic edits to photo shoots in postproduction to create variations.

How we’re solving it

Ensure all content across experiences meets brand standards with image editing and enhancements APIs.

Business impact



Lower cost and administrative burden via fewer photo shoots.



Less time spent on mundane tasks, accelerating speed to market and reducing creative turnover.

1

Auto Tone API to optimize image color and consistency.



2

Depth Blur API to elevate images to professional standards.



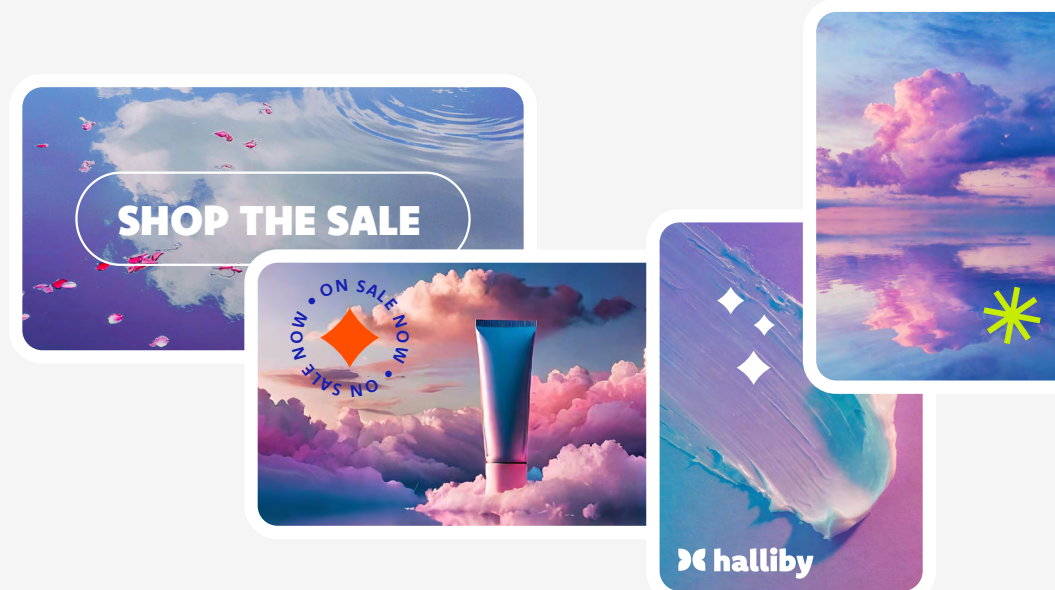
3

Generative Fill API to generate consistent background themes.



4

Photoshop Actions API to add brand elements to images.



Once generated, assets can be directly routed to an asset management system for tagging, storage, and activation.

FIREFLY SERVICES USE CASE

Engage customers with on-brand generative experiences.

The challenge

Brands want to provide customers with engaging ways to generate unique, custom content in interactive marketing campaigns.

However, leveraging generative services can be expensive and opens the company up to risks.

How we're solving it

Simulate generative creative experiences for customers to keep them actively engaged with your brand.

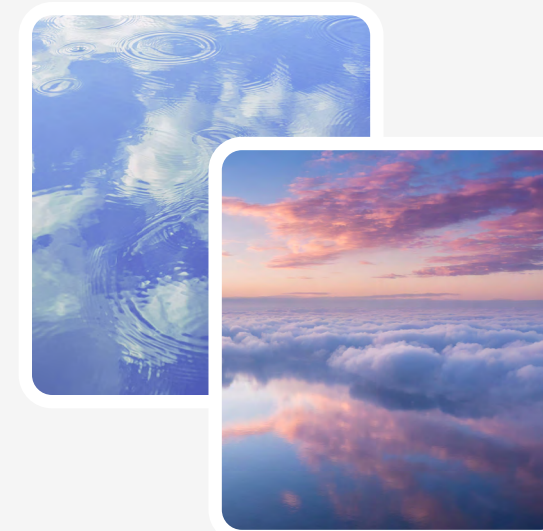
Business impact



Higher engagement and brand loyalty via interactive customer experiences.

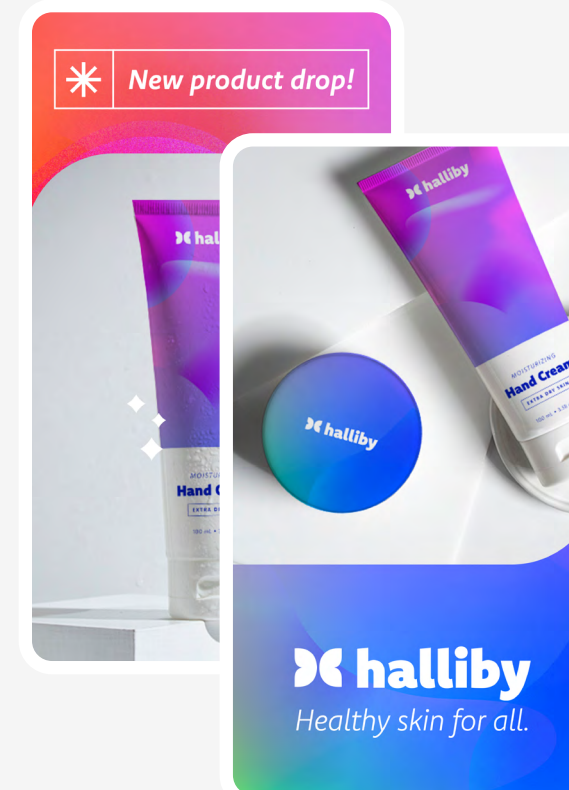


Save costs and ensure experiences are on brand.



1

Pre-generate tens of thousands of on-brand images using **Text to Image API** with **Generative Match** to serve as backgrounds.



2

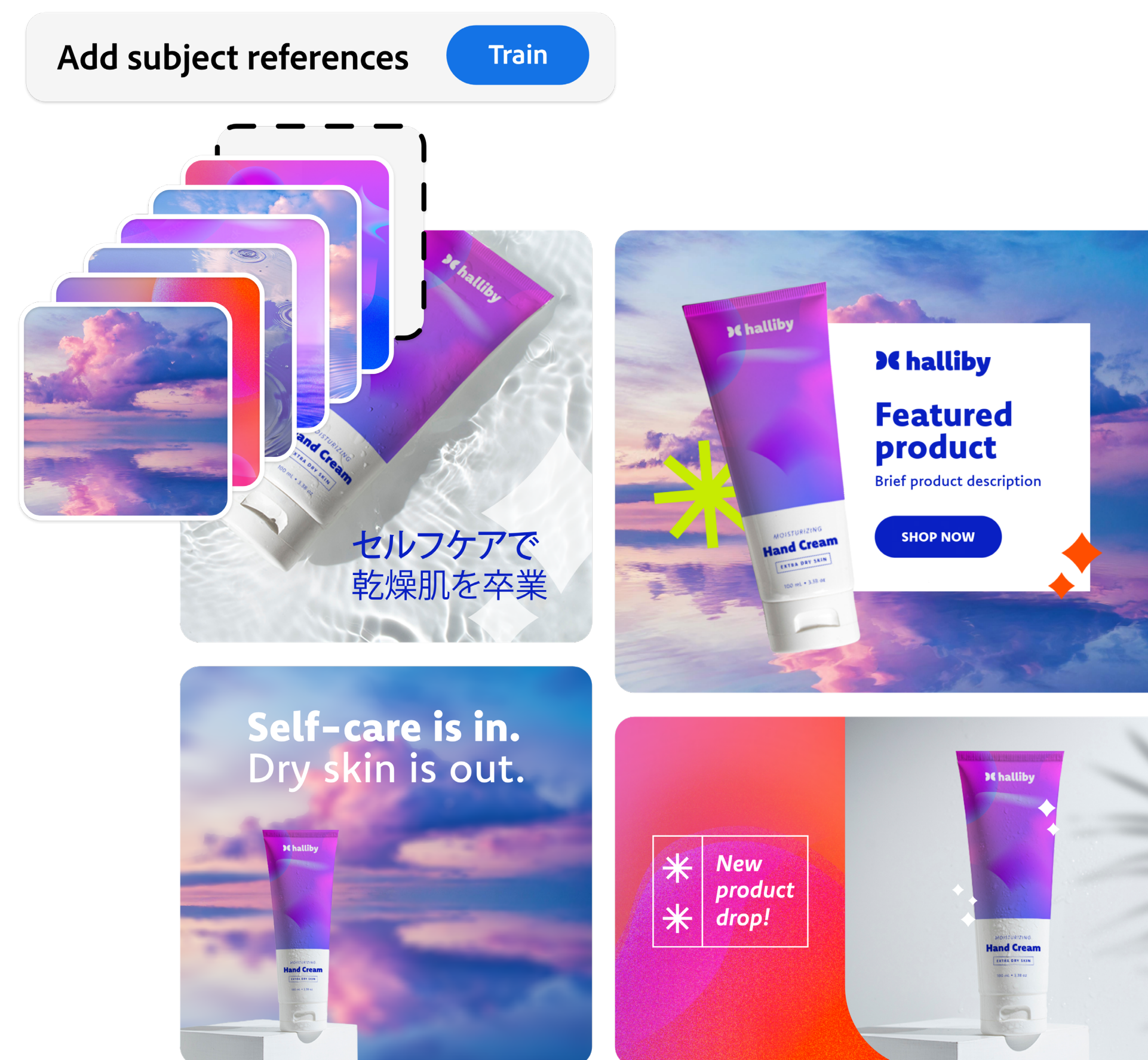
Translate customer inputs into a unique montage with the **Photoshop Actions API** to assemble the product images, backgrounds, and text.

The workflow can be extended to Adobe Express for light edits and then directly pushed to social channels for promotion.

Augment Firefly Services with Custom Models.

Create and share Custom Models across your organization to generate campaign styles, backgrounds, and objects—all unique to your brand.

- **Easily train and maintain.** Train Custom Models based on a handful of brand images without requiring complex prompts, engineering, or massive data sets.
- **Generate with confidence.** Assets used for training Custom Models will not be used to train Firefly's foundational models.

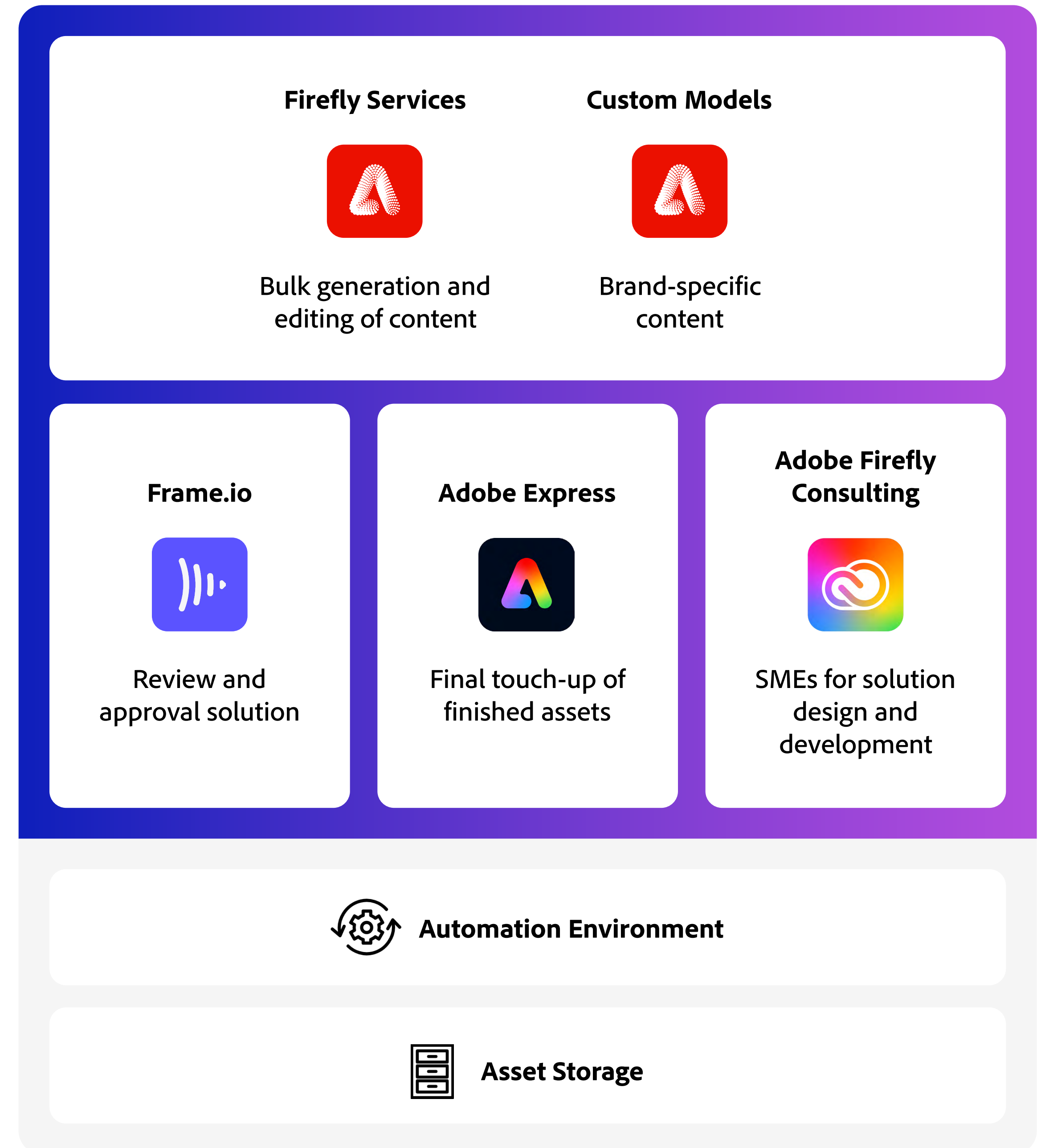


Recipe for success: A typical deployment scenario.

Factoring Firefly Services into a larger workflow leads to exponential gains in efficiency and scale. Consider these steps and their impact in a typical deployment scenario:

- 1 Firefly Services APIs do the hard work of generating and editing content variations.
- 2 Custom Models help ensure that enterprises can create content that is on brand before scaling it with automation.
- 3 A review and approval solution, such as Frame.io or Workfront, ensures checkpoints can be built into the workflow before variants are finalized.
- 4 SMEs in enterprise IT or external partners design, develop, and maintain the solution.
- 5 An automation environment provides the workflow engine and logic to run the process.
- 6 Finally, assets are routed to an asset management and storage system.

Combining Firefly Services and Custom Models with these common enterprise technologies puts you on a path to successfully scale content production.



Scale asset production today.

We have designed a Fast Start package that combines Firefly Services with the critical technologies needed to begin scaling content production now. In addition to Firefly Services and Custom Models:

- Frame.io provides review and approval capabilities.
- Adobe Express lets marketers customize finished assets.
- Adobe Firefly Consulting includes SMEs for solution design and development.

These tools can be paired with Workfront Fusion for low-code automation and AEM Assets for asset management and storage, or integrate the Fast Start solution into existing automation environments and asset management tools.

Challenge

With **80% of creative costs and time associated with tedious tasks like retouching**, IBM needed a more efficient and scalable way to create content.

Solution

IBM leveraged Adobe Firefly in a pilot social media campaign to generate images that would highlight the spirit of their AI-driven co-creation processes with clients. With a simple text-to-image prompt, they were able to:

- Generate **200** initial assets and **1,000+** derivative assets
- Drive **26x higher engagement** than IBM's average paid social assets

“Creatives spend too much of their days on mundane tasks that can now be automated with generative AI. The productivity gains are incredible, but even more exciting is the time we can make available for creative ideation.”

Billy Seabrook

Global Chief Design Officer, IBM Consulting

Your questions. Our experts.

Teams across your entire organization can increase and amplify their creative work through the powerful generative AI of Adobe Firefly. Ready to try it out? Get in touch with your sales representative to get started.



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Sources

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["State of Creativity Report 2024," Adobe, Edelman Data & Intelligence, and Havas Play, 2024.](#)

["State of Digital Customer Experience," Adobe, 2023.](#)