Adobe Unveils Future of Creative Cloud With Generative AI as a Creative Co-Pilot in Photoshop

• Firefly, Adobe's family of creative generative AI models, now supports Generative Fill, allowing users to extend images and add and remove objects
• Adobe has integrated Firefly directly into Photoshop, marrying the speed and ease of generative AI with the power and precision of Photoshop
• This is the start of the company's major initiative to integrate generative AI into existing creative workflows across Creative Cloud, giving users a creative co-pilot to accelerate ideation, exploration and production

SAN JOSE, Calif. — May 23, 2023 — Today, Adobe (Nasdaq:ADBE) unveiled Generative Fill in Photoshop, bringing Adobe Firefly generative AI capabilities directly into design workflows. The new Firefly-powered Generative Fill is the world's first co-pilot in creative and design workflows, giving users a magical new way to work by easily adding, extending or removing content from images non-destructively in seconds using simple text prompts. This beta release of Photoshop is Adobe's first Creative Cloud application to deeply integrate Firefly with an exciting roadmap ahead that will transform workflows across Creative Cloud, Document Cloud, Experience Cloud and Adobe Express.

Adobe has over a decade-long history of AI innovation, delivering hundreds of intelligent capabilities through Adobe Sensei into applications that hundreds of millions of people rely upon. Features like Neural Filters in Photoshop, Content Aware Fill in After Effects, Customer AI in Adobe Experience Platform and Liquid Mode in Acrobat empower Adobe customers to create, edit, measure, optimize and review billions of pieces of content. Firefly, Adobe's family of creative generative AI models, now brings even more precision, power, speed and ease directly into workflows where content is created or modified.

Firefly, Adobe's family of creative generative AI models, launched six weeks ago with an initial focus on the generation of images and text effects. It has quickly became one of the most successful beta launches in Adobe's history, with beta users generating over 100 million assets. Since its launch, Firefly has been expanded to support vector recoloring and generative fill. Firefly is the only AI service that generates commercially viable, professional quality content and is designed to be embedded directly into creators' workflows. Firefly's first model is trained on Adobe Stock images, openly licensed content and other public domain content without copyright restrictions. Enterprises will be able to extend Firefly with their own creative collateral in order to generate content that includes the company's images, vectors and brand language. The integration of Firefly across Adobe Experience Cloud applications will allow marketing organizations to use Firefly to accelerate their content supply chain production.
“By integrating Firefly directly into workflows as a creative co-pilot, Adobe is accelerating ideation, exploration and production for all of our customers,” said Ashley Still, senior vice president, Digital Media at Adobe. “Generative Fill combines the speed and ease of generative AI with the power and precision of Photoshop, empowering customers to bring their visions to life at the speed of their imaginations.”

Supercharging Creativity and Design
The deep integration of next-generation AI across Photoshop’s core tools uniquely enables new creative workflows that supercharge ideation with precise creative control for production quality content creation.

Generative Fill automatically matches perspective, lighting and style of images to enable users achieve astounding results while reducing tedious tasks. Generative Fill expands creative expression and productivity and enhances creative confidence of creators with the use of natural language and concepts to generate digital content in seconds:

- **Powered by Firefly:** Firefly is designed to generate images that are safe for commercial use and is trained on Adobe Stock’s hundreds of millions of professional-grade, licensed, high-resolution images, helping ensure Firefly won’t generate content based on other peoples’ or brands’ intellectual property (IP).
- **Magically leap from idea to image, with simple text prompts:** Add, extend or remove content from images to achieve astounding results.
- **Edit non-destructively:** Create newly generated content in generative layers, enabling you to rapidly iterate through a myriad of creative possibilities and reverse the effects when you want, without impacting your original image.
- **Create at a transformative rate:** Experiment with off-the-wall ideas, ideate different concepts and produce boundless variations of high-quality content as fast as you can type.
- **Available as a web tool:** Generative Fill is also available as a new module in the Firefly beta for users interested in testing the new capabilities on the web.

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. Generative Fill supports Content Credentials, serving an essential role in ensuring people know whether a piece of content was created by a human, AI-generated or AI-edited. Content Credentials are like “nutrition labels” for digital content and remain associated with content wherever it is used, published or stored, enabling proper attribution and helping consumers make informed decisions about digital content. The technology was developed by the Content Authenticity Initiative, which Adobe founded and recently surpassed 1,000 members.

Additional New Innovations in Photoshop
In addition, Adobe updated Photoshop today with new capabilities that enhance and accelerate creative workflows. New Adjustment Presets, Contextual Task Bar, Remove Tool and Enhanced Gradients empower users to make complex edits and create unique designs while saving time. Read more [here](#).

Community Inspiration
Connect with your favorite designers and Creative Cloud evangelists as they live stream their Photoshop and Firefly tips and tricks on May 23rd. Join them between 8 a.m. and 4 p.m. PST as they answer questions.

Availability
Photoshop’s Generative Fill feature is available in the desktop beta app today and will be generally available in the second half of 2023. Generative Fill is also available today as a module within the [Firefly beta app](#).

About Adobe and Artificial Intelligence
Adobe is making the world more creative, productive and personalized with AI as a co-pilot that amplifies human ingenuity. For decades, Adobe has delivered hundreds of intelligent capabilities across 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 (LLMs). These innovations are anchored in Adobe Experience Platform (AEP), which brings customer data and content together across an organization under one common language model.

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About Adobe
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