Understanding the Editing Ecosystem

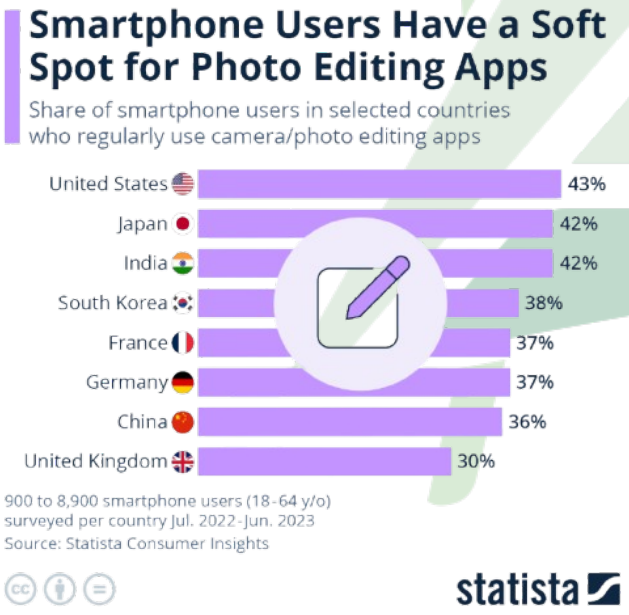
We studied the problem statement and validated if the problem needs to be solved by both market sizing and user needs, we then analyzed competitors to note that automation is lacking everywhere (ai features might exist but their is a lack of conversational integration). We then studied our user personas in detail and based on their pain points mapped out 2 solutions followed by their pitfall and future plans.

Redefined problem statement

We need to create an app and solve for conversational AI, so that creators can easily edit their images through AI-assisted features. This will solve the pain point of having complex workflows and will increase the customer satisfaction.

But why solve this?

Among people who share images online, a high share engage in editing before posting: in a survey, 68 percent of adults admitted they will not share images without editing them first, Traditional complex tools pose a barrier: according to a market analysis of photo-editing software, 59 percent of users report software complexity as a challenge. Further, in a 2025 global survey of 16,000 content creators, Adobe found that 86 percent of creators are already using generative-AI for creative tasks, and among them, common uses include editing, upscaling and enhancement (55 percent).

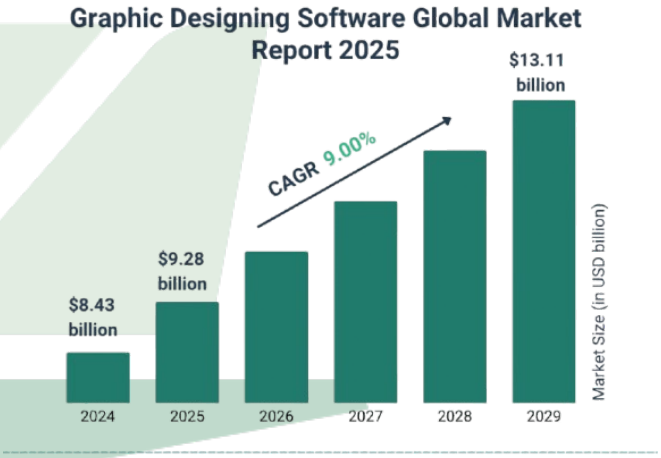


Let's think in the future! Guesstimate for 2030 Impact if 80 percent adoption

Starting from 303 million global creators (2022 baseline), assume continued growth of "creator population." If we conservatively assume a modest growth rate of, say, 10 percent per year (through 2030 → 8 years), that yields a rough global creator population in 2030 of around 650 million. If 80 percent of those adopt/use our AI-assisted image-editing features, that's 520 million users globally, a very large addressable user base.Even if adoption or growth is lower, the potential is still significant because a large fraction of social-media users already do some editing but struggle with complex tools, so there's huge demand for simpler, conversational-AI driven editing flows.

Why solving this matters?

Reduces friction and learning-curve for millions of aspiring creators / casual users who find existing advanced tools too complex. Converts "huge demand" (people who want to edit but can't/don't) which boosts image-editing penetration, For creators it enables faster editing and production cycles, which is critical given the volume/frequency needs for social-media content and for business it is important tapping into a large and growing global "creator economy" and mobile-photo-editing market that is projected to grow, with increasing adoption of AI-powered tools.



User personas

Photographers . Photographers usually click their photos and want it to get edited very fast.

Designers. Designers want to focus more on concepts but end up wasting a lot of time in actually designing these concepts.

Illustrators. The pain point is same that they want to spend a lot more time in concept but they spend a lot more time in creating those concepts.

Marketers. They want to spend a lot more time on marketing strategy, but they end up spending a lot of time on creating these market posters or posts.

Table 1. Feature Comparison of Mobile Editing Apps

Category	Adobe Photoshop (Mobile)	PicsArt	Snapseed	AI Automated?
Basic Adjustments	Filters/Looks, Light/Color Adjustments, Clarity, Sharpen, Reduce Colors	Adjustments, Curves	Tune Image, Details, White Balance, Curves	Mostly No (manual sliders)
Crop & Transform	Crop, Rotate/Flip, Resize, Perspective	Crop, Flip/Rotate, Resize, Perspective	Crop, Rotate, Perspective, Expand	No (except Snapseed Expand = AI)
Retouching	Heal, Smooth Skin, Face Editing, Makeup, Red Eye	Retouch	Portrait, Head Pose	Yes (skin/face retouch = AI)
Selection & Masking	Background Removal, Select Subject, Masks	Selection, Cutout, Mask	Selective, Brush	Yes for BG removal & auto-selection
AI Tools	Generative Fill, Enhance, Auto Color	AI Replace, AI Enhance, Magic Remove, AI Try-On	—	Yes (fully AI-driven)
Object/Background	Background Replace, Overlays	Magic Remove, BG Remove	Healing	Yes for BG remove & object removal
Effects	Themes, Filters, Overlays	Effects, Lens Flare	Vintage, Drama, Grainy Film, Noir	Mostly No (preset filters)
Creative Tools	Text, Stickers, Draw, Borders	Stickers, Frames, Callouts	Text, Frames, Double Exposure	No
Presets	Filters/Looks	Effects	Portrait, Smooth, Pop, Faded Glow	No

But what exactly are users trying to edit?

Survey findings show that users commonly edit photos across multiple apps, performing tasks such as applying filters, cropping, retouching, color adjustments, and object removal. Among these, 49 percent primarily modify lighting, making relighting one of the most demanded editing actions.

Pain Points to Solution Mapping

Across all personas, the major challenge is the complexity of existing workflows. While users know that tools like Adobe Photoshop can perform the desired edits, they find the interface scattered and time-consuming. To address this, we propose an Agentic framework that interprets a user query and automatically sequences the relevant existing features. This streamlines workflows without introducing new tools, minimizing friction and speeding up the overall editing experience.

Relighting remains particularly difficult. In Photoshop, it requires manual control of exposure, shadows, highlights, temperature, and masks. To reduce this complexity, we introduce a Gesture-Based Relighting Feature: users simply swipe to shift the light direction, and the system automatically adjusts the underlying parameters.

User journeys and wireframes for both features are detailed in the design document.

Pitfalls and Mitigations

Some user queries may exceed current Photoshop capabilities, resulting in partial outputs. To manage this, thumbs-down feedback will help identify unmet needs, and the system will clearly communicate limitations (e.g., “Three of five edits applied”) while suggesting commonly paired edits.

If the prompt lacks clarity on the target region, the user can be asked to highlight it. For gesture-based relighting, brightness inconsistencies will be corrected over time through user feedback and model fine-tuning.

Datasets

The VIDIT-Depth-ControlNet dataset on HuggingFace is a curated subset of the VIDIT illumination dataset, containing 12,000 samples from 300 Unreal Engine scenes under multiple lighting conditions. The original dataset includes 390 scenes, 40 illumination settings, and 1024×1024 renders across 5 color temperatures (2500,K–6500,K) and 8 light directions (N, NE, E, SE, S, SW, W, NW). The curated version provides RGB images, GLPN-predicted depth maps, BLIP-2–generated captions, and metadata such as direction and temperature. This dataset supports the gesture-based relighting feature. The agentic feature requires no dataset, as it automates existing tools.

Expected Impact for Creators

Time-intensive edits such as relighting and masking are reduced from 30 minutes to around 15 seconds, cutting effort by over 99 percent. With similar accuracy expected by 2030, creators could produce up to 120× more designs in the same time, substantially increasing their earning potential.

Future roadmap to ensure high user retention

The agent will evolve by learning from individual user behavior, enabling personalized auto-suggestions. This ensures that Photoshop delivers a uniquely tailored experience that competing models cannot replicate. By analyzing frequent user prompts, we can identify high-demand tasks and develop standalone AI features such as gesture-based relighting, further lowering friction and maintaining long-term user satisfaction and retention.

Sources

Data was compiled from Statista, ePHOTOzine, Global Growth Insights, Adobe’s Future of Creativity (2022), Adobe’s 2025 global creator survey, PetaPixel (2024), and the VIDIT-Depth-ControlNet dataset (HuggingFace / Nahrawy).