

Product Prototype Development and Testing Plan for Aperture Photo-Sharing App

1. Introduction

Background on Aperture:

Aperture connects people through photos, allowing users to share moments and express themselves.

Current Challenges:

User engagement and interaction are declining, reducing ad impressions and impacting revenue. A drop in active users has harmed retention and overall business performance.

Problem We're Solving:

Decreased engagement is lowering ad visibility and reducing revenue, while a shrinking user base is affecting retention.

Target Audience:

Active photo-sharing users (18–45) and creative professionals seeking a platform to showcase their work.

2. Problem Statement

“Young users aged 18-24 are increasingly disengaging from the Aperture app due to a lack of innovative features and dynamic content”.

This disengagement is leading to a significant decline in user interaction, which threatens the app's relevance and competitiveness in a market with more engaging alternatives

3. Hypothesis and Approach

- **Hypothesis:**

We hypothesize that by making filters more accessible, intuitive to use, and seamlessly integrated into the app's workflow, young users (aged 18-24) will engage more frequently, spend more time within the app, and share content more actively, ultimately increasing both user interaction and retention rates

- **Approach:**

Our prototype will focus on simplifying the process of discovering and using filters to improve user engagement. To achieve this, we'll experiment with the following changes:

IDEA/ CHANGE	DESCRIPTION	REASONING
Optimized Filter Placement	Reposition filters to a more prominent location in the UI to make them easier to find and use.	Reduces friction, ensuring filters are easily accessible, encouraging higher engagement and usability
Streamlined Filter Categories	Introduce categories like "Popular," "Recently Used," and "Favorites" for quicker filter discovery.	This change addresses user frustration when sifting through an unorganized list of filters Improves discoverability by reducing search time, and encouraging users to engage with the app more frequently.
Interactive Filter Previews	Implement live previews to show how filters will affect the photo before application.	Makes the decision-making process faster, more enjoyable, and more interactive, boosting user engagement.
Filter Recommendations Based on User Preferences	Personalize filter recommendations based on past user activity.	Increases engagement by providing users with relevant options tailored to their preferences, encouraging regular use.
Improved User Interface for Filter Selection	Introduce a carousel or swipe feature for filter selection.	Provides a smoother, more intuitive experience, leading to faster filter exploration and increased usage.

4. Product Goals and Success Metrics

- **Product Goals:**

PRODUCT GOAL	DESCRIPTION	WHY
Increase User Engagement	Drive a measurable increase in daily interactions from active users, with a focus on the 18-24 age group	Increased interactions will signify a return of interest and sustained usage, which is critical to the app's success
Increase Filter Usage	Improve filter usage rates, particularly among young users (18-24), by enhancing filter accessibility and usability.	Filter engagement directly correlates with higher app engagement, and improving access to filters will encourage greater use.
Improve User Retention	Increase user retention by providing an intuitive and engaging app experience, with filters as a key feature	Retention is a key indicator of long-term success. A smoother, more engaging user experience will encourage users to continue using the app and return regularly.

- **Success Metrics:**

Objective (O): Revitalize user engagement, particularly among 18-24-year-olds, by improving accessibility, usability, and overall experience of filters.

Objective 1: Improve user engagement through optimized filter functionality.

- **KPI:** Achieve a 25% increase in filter usage rate among 18-24-year-olds within 3 months post-launch.
- **KPI:** Increase the active usage rate of young users (18-24) by 20% within the first month post-launch.
- **KPI:** Achieve an average ease-of-use score of 4.5/5 or higher from users on filter discovery and application within 1-month post-launch..

Objective 2: Enhance user satisfaction and retention through a smoother filter experience.

- **KPI:** Reduce time to find and apply filters by 30% within 1 month post-launch.

- **KPI:** Increase task completion rate for filter application by 15% within 1 month post-launch.
- **KPI:** Gather 80% or more positive feedback on the new filter experience from users within 3 months post-launch.

5. Lo-Fi Prototype

- **Prototype Screens**

This prototype includes 4 screens illustrating the proposed filter features and interactions [PROTOTYPES](#)

Rationale for Design Choices:

SCREEN	FEATURE	RATIONALE FOR DESIGN	CUSTOMER PAIN POINTS INTENDED TO ADDRESS
1	Filter option below profile on the home screen.	Accessible placement for seamless interaction without interrupting the main feed flow	Difficulties in finding and applying filters quickly from the home screen
2	Camera screen with highlighted saved filter	Quick access to recently used filters and real-time preview encourages use and personalization	Frustration with filter accessibility while capturing photos, leading to inconsistent engagement.
3	Filter category menu with recommendation options	Organized categories and recommendations streamline the filter selection process, reducing the time to find preferred filter styles	Lengthy-time spent searching for filters, often resulting in skipped or suboptimal selections
4	Filter preview screen with toggle for comparison	Before-and-after toggle and save option enhances user confidence in filter selection, providing clarity on the final image appearance before posting.	Lack of clear preview, causing hesitation or frequent re-edits after applying filters.

6. Testing Plan

- **Testing Objectives:**

The purpose of defining testing objectives is to ensure we're evaluating the aspects of the filter functionality that matter most to user experience and engagement.our main testing objectives include:

1. Determine how quickly and intuitively users can locate and apply filters from various screens.
2. Observe if users can easily navigate through filter categories, recommendations, and saved filters, and if they understand the layout and options.
3. Check if users can effectively preview filters and understand the before-and-after feature to make confident selections.
4. Identify how users respond to personalized recommendations and whether these recommendations enhance their overall experience.
5. Assess user enjoyment and satisfaction with the filter functionalities, ensuring that any frustrations or pain points are minimized.

- **User Tasks:**

We are using **non-moderated testing** to assess how users interact with various features of the prototype. Each task is designed to test specific interactions with the filter features, and the results will help us identify usability challenges

USER	DEMOGRAPHICS	AGE	USAGE PATTERN	OTHER INFO
User 1	Frequent social media user	19	Uses photosharing apps and Snapchat daily, frequently posts pictures	Beginner with photo editing tools, comfortable with mobile apps
User 2	Occasional user of photo apps	23	Uses Photosharing apps 2-3 times a week for browsing	Moderate knowledge of filters, prefers simplicity
User 3	Enthusiastic photographer	22	Active on Instagram, shares photos weekly	Experienced with photo apps, enjoys experimenting with filters
User 4	Minimal photo editing user	20	limited use of filters	New to photo editing apps, prefers quick and easy solutions
User 5	Social media influencer	24	Frequently posts high-quality photos, uses filters for branding	Highly familiar with filters, expects advanced features

TASK NAME	OBJECTIVE	STEPS	WHAT TO OBSERVE	USAGE PATTERNS	OTHER INFO
Task 1: Find and apply a filter from the home screen	Test filter accessibility on the main screen.	1. Open the home screen. 2. Identify the profile and the filter option. 3. Apply a filter.	Time taken, ease of filter discovery, and application.	Frequent user of photo apps, experienced with filter placement.	Any confusion with where to find filters, speed of applying a filter.
Task 2: Select a filter using the camera screen	Assess the ease of selecting and applying filters during photo capture.	1. Open the camera screen. 2. Browse through the saved filters. 3. Select a filter. 4. Take a picture.	Interaction with the camera screen, real-time filter previewing, and ease of toggling between filters.	Frequent social media users, quick to explore camera app features.	Speed of switching filters, preference for ease of toggling, filter preview clarity.
Task 3: Explore filter categories and select a new filter	Test the category-based filter organization	1. Click on the filter option in the camera screen. 2. Browse through categories. 3. Select and apply a filter.	Ability to navigate categories, ease of selecting a filter, and user preference for filters within categories.	Moderate users, familiar with category-based systems.	Any difficulty in understanding categories, preference for specific filter types
Task 4: Interact with filter recommendations	Test user response to filter suggestions based on past behavior.	1. Navigate to the recommendation section in the filter menu. 2. Browse through personalized suggestions. 3. Apply a filter.	Engagement with recommended filters, ease of accessing recommendations, and filter selection process.	Social media influencers, familiar with recommended content.	How well recommendations align with user preferences, perceived relevance of recommendations.
Task 5: Preview a filter and save it	Ensure users can easily preview and save filters.	1. Apply a filter. 2. Toggle between before/after views. 3. Save the filter.	Clarity of before-and-after preview, speed of saving a filter, and toggle usage.	Frequent users who engage with filter previewing	Any confusion when using the preview toggle, ease of saving the filter.















- **Color-Coded Key:** The results will be color-coded to indicate success or difficulty in completing each task:
 - = **Easy** (Task completed on first attempt without any difficulty)
 - = **Some Difficulty** (Task completed with some issues or extra steps)
 - = **Failed** (Task could not be completed)
 - 💡 = **New Ideas** (Feedback that can inspire new features or improvements)

7. User Testing Results

- **Task Success Rate and Challenges:**

After running the test with 5 users, we've compiled the results below.

TASK	USER 1	USER 2	USER 3	USER 4	USER 5	AVERAGE SUCCESS RATE	CHALLENGES/OBSERVATIONS
Task 1: Find and apply a filter from home screen	●	●	●	●	●	80%	<p>Some users took longer to find the filter option. Users found it challenging to differentiate the filter icon from others on the home screen.</p> <p>What went great: The filter placement was intuitive for most.</p> <p>What went wrong: Users expressed difficulty in distinguishing the filter from other icons.</p>
Task 2: Select a filter using the camera screen	●	●	●	●	●	60%	<p>Some users struggled with filter switching, and some did not notice how to swipe through saved filters.</p> <p>What went great: Real-time preview was appreciated.</p> <p>What went wrong ●💡: Swiping to switch filters wasn't intuitive enough.</p>

Task 3: Explore filter categories and select a new filter						80 %	<p>Users struggled to understand how filters were organized. Some found the "new filter" section confusing.</p> <p>What went great: Categories worked for most users.</p> <p>What went wrong: The organization wasn't clear for all users.  </p>
Task 4: Interact with filter recommendations						60%	<p>A few users were unsure about whether recommendations were personalized. The recommendations were hard to access.</p> <p>What went great: The idea of recommendations was appreciated.</p> <p>What went wrong: Recommendations were hidden behind menus, making them harder to use.  </p>
Task 5: Preview a filter and save it						80%	<p>The preview was mostly successful, but the "Save" button was not obvious, and unsaved changes occurred if users clicked the "X" symbol.</p> <p>What went great: The before-and-after toggle was praised.</p> <p>What went wrong: Users struggled to find the "Save" button and experienced unsaved changes when exiting. </p>

User Feedback Summary	New Ideas Based on Testing
<ul style="list-style-type: none">● Filter Icon Placement: Users had difficulty finding the filter option on the home screen. They suggested it was hard to differentiate the filter icon from other icons.● Swiping Between Filters: Some users didn't realize how to swipe between filters on the camera screen. They expressed frustration with this interaction.● Filter Categories: A few users felt the filter categories were too broad and confusing. They found it challenging to navigate to their preferred filter.● Save Button Visibility: Many users missed the "Save" button while previewing filters. This led to frustration, especially when users clicked the "X" to exit without saving changes.● Recommendations Section: Users expressed difficulty accessing the recommendations, which were hidden in the side menu.	<ul style="list-style-type: none">● Clearer Filter Placement: To address the issue of filter visibility, we can experiment with a more prominent icon, possibly adding a visual border or highlight to make the filter icon stand out more clearly.● Improved Swiping Mechanism: Some users struggled with switching between filters. Solution: Add clearer swipe instructions or visual cues to help users understand how to switch filters more intuitively.● Subcategories in Filters: To reduce confusion, we could add subcategories or better labels to organize filters more clearly, so users don't feel overwhelmed by broad categories.● Save Confirmation or Autosave: To solve the issue of lost changes, we should implement a save confirmation prompt when users try to exit or introduce an autosave feature to retain changes even if users accidentally exit.● Easier Access to Recommendations: We can make recommendations more visible and accessible, possibly placing them directly on the camera screen or making them a more prominent feature on the home screen. 💡

8. Action Plan for Prototype Improvements

Areas of Improvement:

- **Filter Icon Visibility:** Make the filter icon more prominent on the home screen with a visual highlight.
- **Swiping Between Filters:** Add clearer swipe instructions or visual cues on the camera screen.
- **Filter Categories:** Introduce subcategories or clearer labels to reduce confusion.
- **Save Changes:** Add a save prompt or autosave when exiting to prevent loss of changes.
- **Recommendations Access:** Make the recommendations section more visible and easier to access.