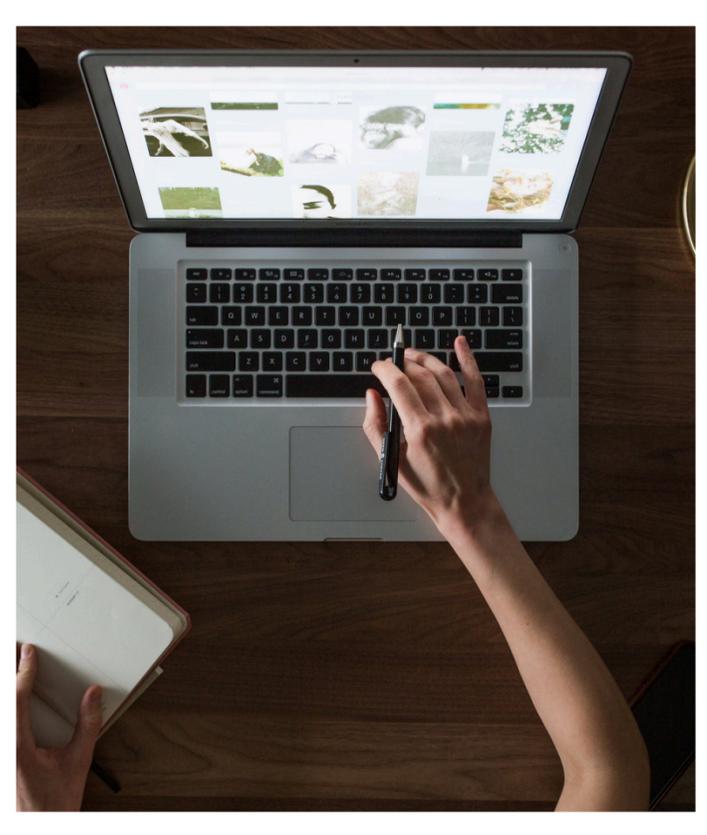


APERTURE: CASE STUDY

A photo-sharing app





HELLO!

Welcome! This case study demonstrates how I applied product management principles to improve a core user experience in a photo-sharing app, using research, prioritization, and measurable outcomes.



AGENDA OVERVIEW

01

**Background
of the Study**

02

**Problem
Statement**

03

Research Data

04

Methodology

05

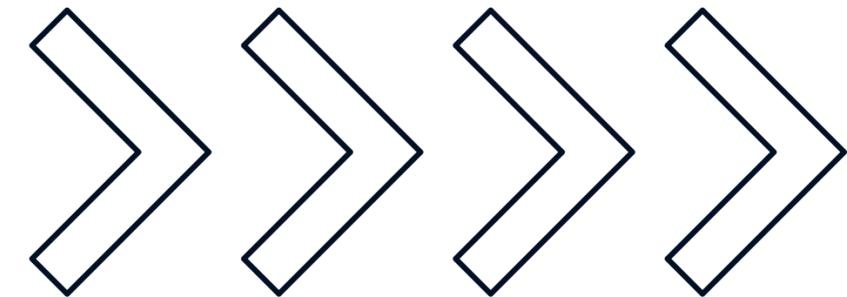
**Proposed
Timeline**

06

Analysis

07

Summary



BACKGROUND OF THE STUDY

Aperture is a photo sharing app founded in 2015 for the purpose of sharing photos of places and people seamlessly to friends and family. The key product features include taking and editing photos in-app, adding effects, browsing and searching the photo feed, sharing comments and sending private messages. The revenue source is in stream photo and video-based ads.

This case study highlights my approach to product development—using user-centered insights to navigate constraints, make informed decisions, and deliver improvements that create lasting value for both users and stakeholders.





PROBLEM STATEMENT

Our study focuses on evaluating the market landscape, consumer trends, and competition pertinent to the new product.

A

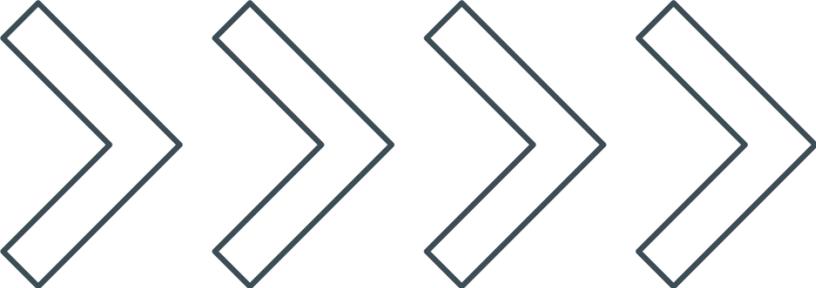
Aperture faces significant challenges with user engagement and retention due to difficulties in discovering and utilizing its photo filters.

B

Currently, 55% of users struggle with filter discovery and utilization. This contributes to a 36% decrease in user retention and a potential 48% loss in revenue.

C

In contrast, users who actively engage with filters demonstrate 73% higher app engagement.



FRAMEWORK

1. AAARR	2. What question are you looking to answer?	3. Why do you need to answer this?	4. What data is required?	5. What is the metric?	6. Is there a success or failure threshold?	7. What action do we take if we are not successful?
Acquisition	How many new users discover and install Aperture after the filter redesign campaign?	Shows if our marketing and app store updates are bringing in new users.	App-store installs, campaign impressions, click-throughs.	% increase in installs or visits to filter-promo page post-launch.	✅ Success $\geq +20\%$ growth every month ❌ Failure $< 10\%$.	Re-evaluate campaign targeting and creatives, in app guidance to use filters, strengthen App Store Optimization copy highlighting filters.
Activation	Do new users engage with the filter feature in their first three sessions?	Indicates clarity and appeal of onboarding and UI.	Session logs, tutorial completion rate, filter usage events.	% of new users applying ≥ 1 filter within the first 3 sessions.	✅ Success $\geq 60\%$ ❌ Failure $< 40\%$.	Simplify onboarding, clear icons, add “Try a Filter” prompt, show preview before save, less effort or clicks for filter views and usage.
Retention	Are users returning weekly to edit photos using filters?	Shows how easy and appealing the new filters are for first-time users.	Weekly active users using filters.	% of users returning within 7 days.	✅ Success $\geq 40\%$ ❌ Failure $< 25\%$.	Trigger re-engagement push (“New filters this week”), personalize recommendations. Show trending or recommended filters.
Referral	Are users sharing filtered photos or inviting friends?	Measures if users love the feature enough to recommend it to others.	Share-to-social counts, invite link clicks, referral code usage.	% of users sharing photos or sending invites.	✅ Success $\geq 15\%$ ❌ Failure $< 5\%$.	Add “Share your creation” pop-up; introduce referral rewards or community features.
Revenue	Are branded filters generating sustainable income?	Validates whether our partnerships with brands (like Coke or Nutella) are profitable.	Brand partnerships signed, impressions of branded filters, CTR, conversion per campaign, revenue per brand.	Total monthly revenue = sum of all (how many times users see or use a particular branded filter \times how much a brand pays every time a user views or applies its branded filter.).	✅ Success $\geq \text{€}10\text{ K/month}$ from ≥ 3 active brands ❌ Failure No growth or drop $> 25\%$.	Gather usage data to pitch stronger return on investment to partners; creative catchy good quality filters; test new verticals (food and beverage, travel, Make up brands).

QUALITATIVE DATA

A	B	C	D
Category	Findings	Example Evidence	Key Takeaway / Insight
Recurrences	Ads, reliability, and feature overload appear across competitors.	“Too many ads” (A), “Locked out after update” (B), “Slow uploads” (C)	Users prefer simplicity and fewer interruptions; ads directly harm experience.
Cohort Trends (Change Over Time)	Satisfaction declines as new features roll out.	“Reliable app” → later “slow after video feature”	Feature bloat over time reduces trust and performance satisfaction.
Correlations / Causations	<ol style="list-style-type: none"> 1. More ads → lower satisfaction 2. More features → lower reliability 3. More social connection → higher retention 	Ads ↑ = frustration ↑ Features ↑ = performance ↓ Friends ↑ = loyalty ↑	To grow, Aperture should balance monetization and simplicity while boosting social features.
Regularities (Consistent Behaviors)	<ol style="list-style-type: none"> 1. Ads & reliability issues appear in all apps. 2. Friends’ presence drives retention. 	“All my friends are on this app.”	These are industry-wide truths — fix ads, improve stability, and build community.
Irregularities (Unique or Mixed Behaviors)	Some love filters, others dislike them; performance varies by competitor.	“Too many filters” vs. “Not enough features for creators.”	Aperture can differentiate with personalization — let users control how creative or minimal they want to be.



QUANTITATIVE DATA

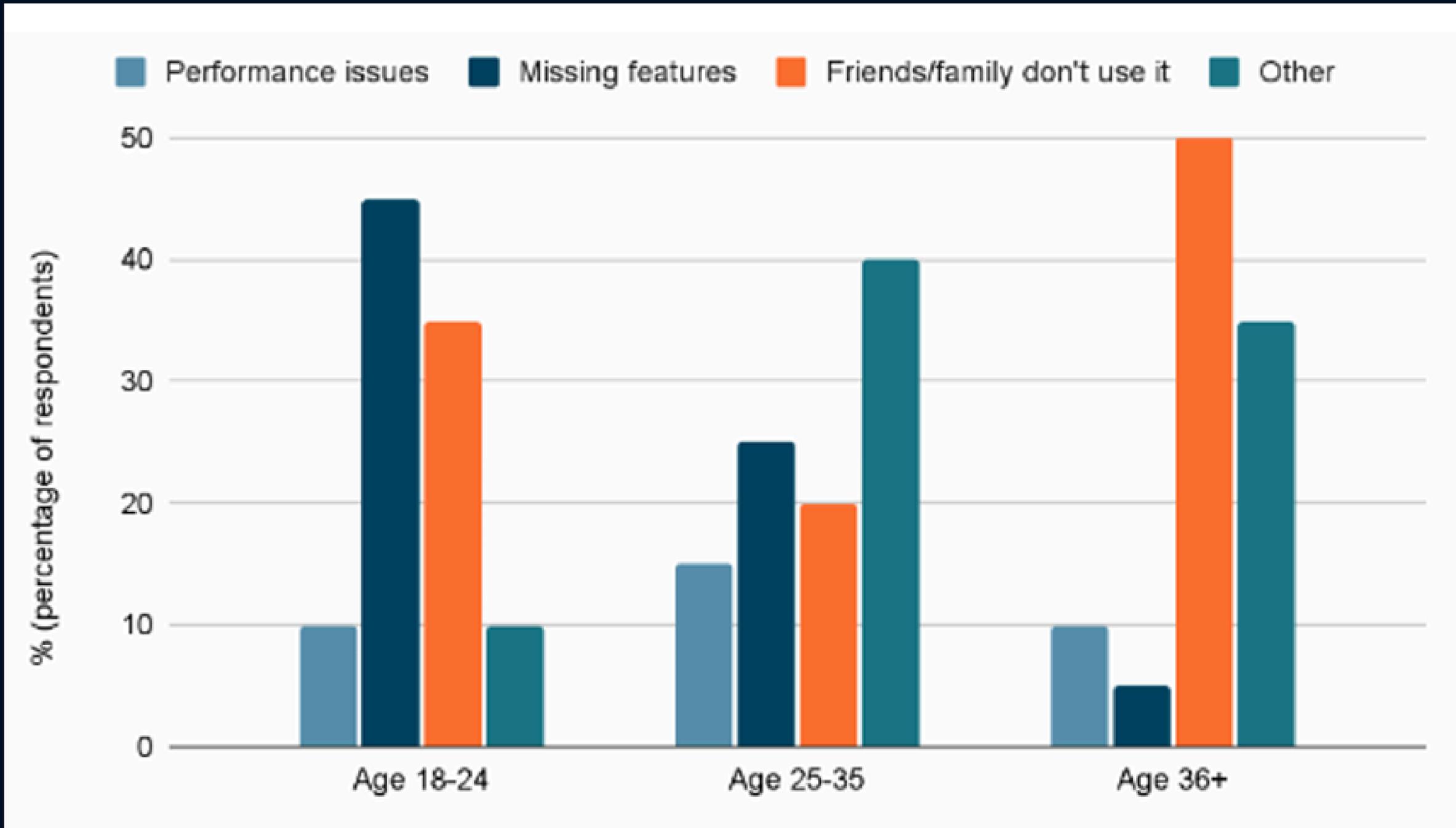
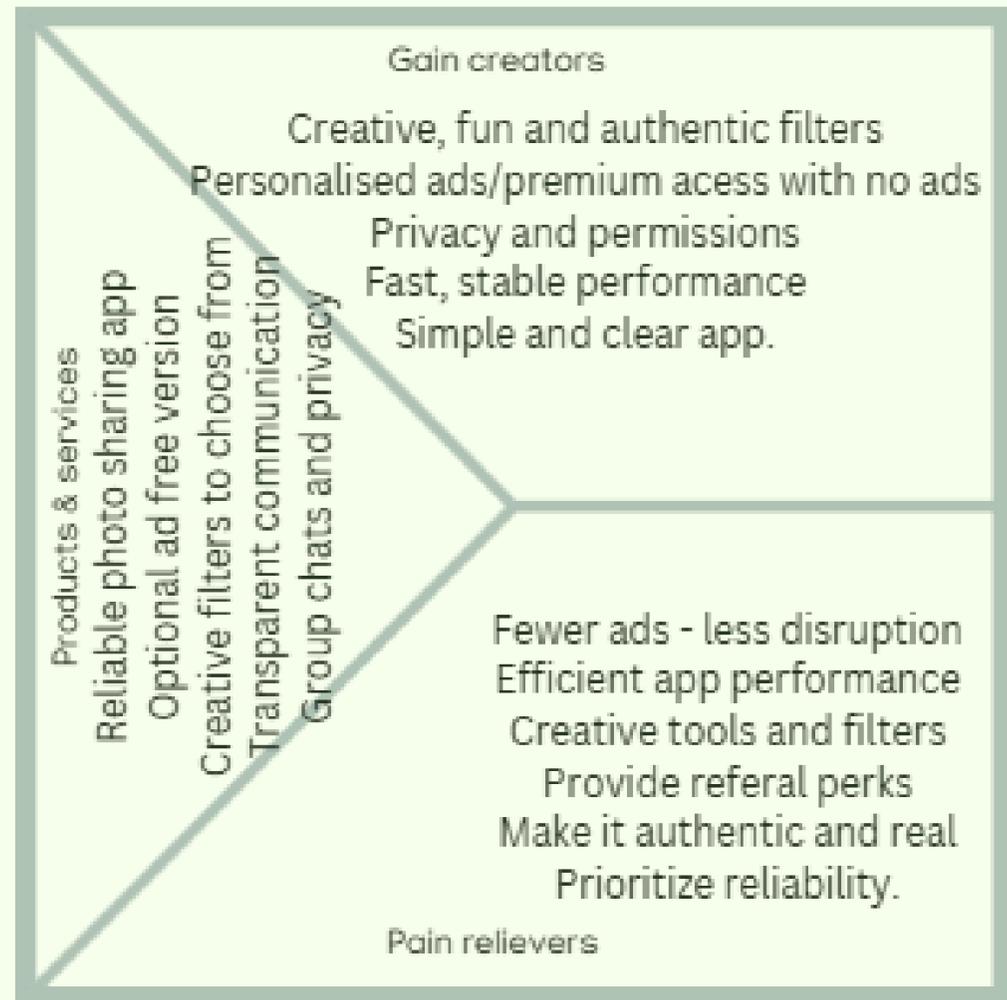


Figure 4. Aperture "exit survey": reasons for leaving the app by age group.

Value proposition canvas

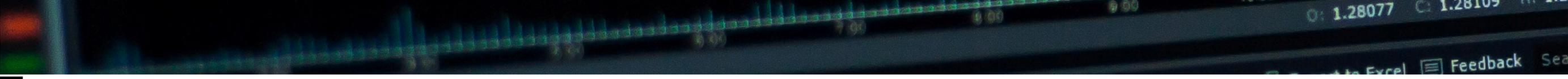
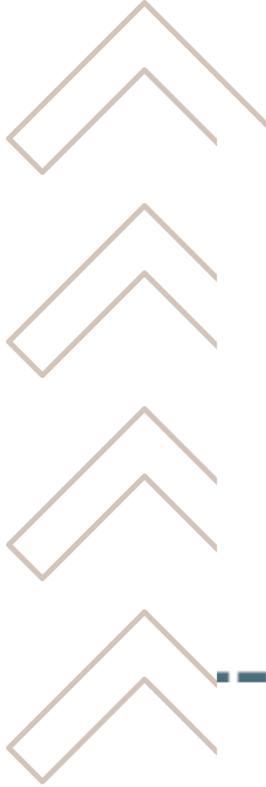


Value proposition



Customer segments

METHODOLOGY



NOW-NEXT-LATER FRAMEWORK

NOW
(WEEK 0-3)

- Draft user stories, set OKRs, perform user research, analyse the exit survey, find competitor features.
- Work on push notifications + email campaigns with creative prompts (e.g., “Your friends shared new fall moments”).

NEXT
(1 MONTH)

- Work on new features, proposed solution.
- Create wireframes, soft launch, check feedback
- Check OKRs,
- Set KPIs
- Update PRD

LATER

- Bring back the target users (age 13-26).
- Add new users in the same group.
- Work on expansion and inclusivity.

PROPOSED TIMELINE

Validating After Development

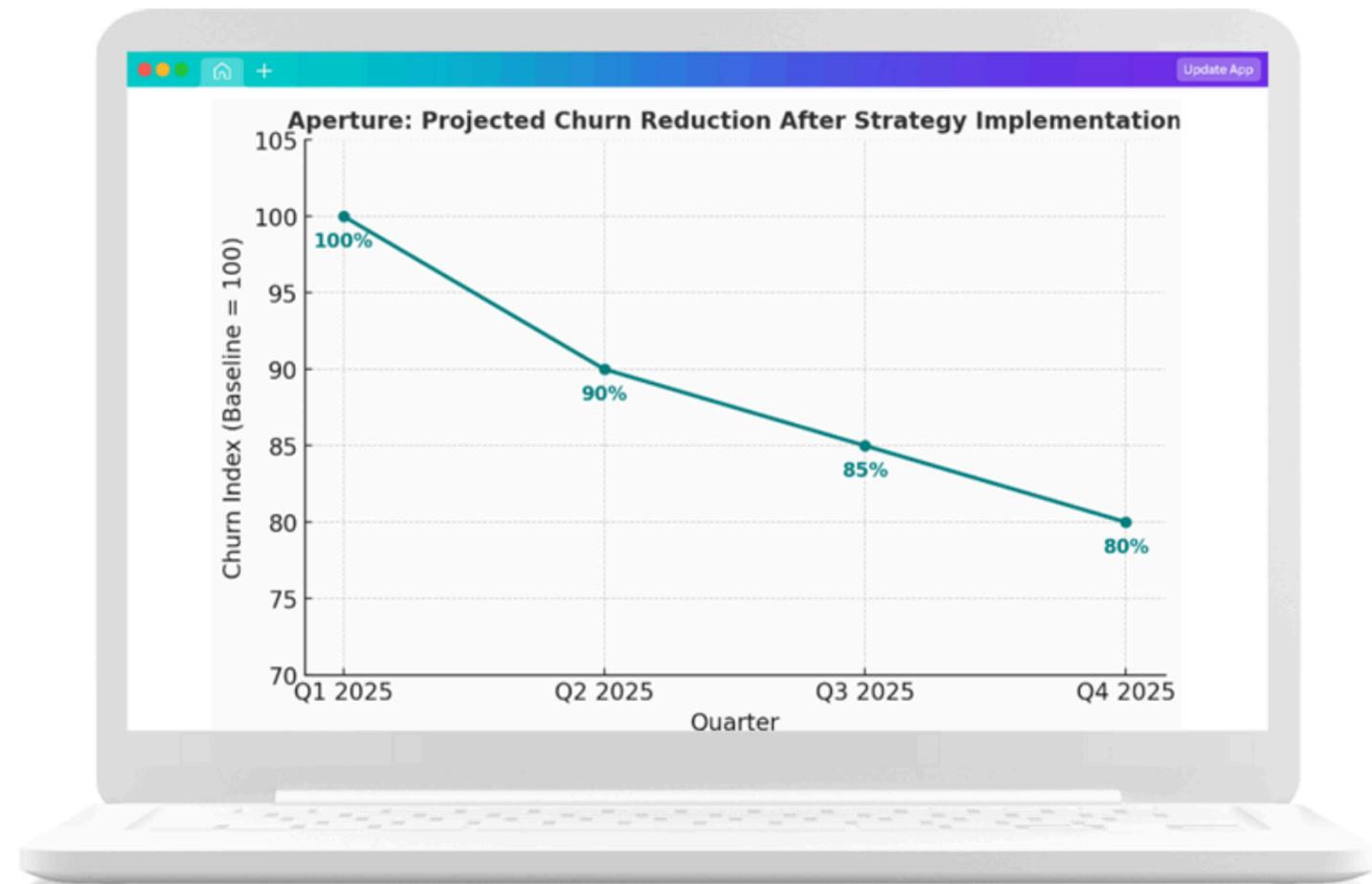
1. Track Filter Engagement Metrics:

- % of users who open the Filters tab
- Average filters tried per session
- Time spent on editing photos

2. Add a simple in-app pop-up like:

“Was this filter easy to find?” or “Do you like this new look?”

3. Check customer feedback and online reviews.



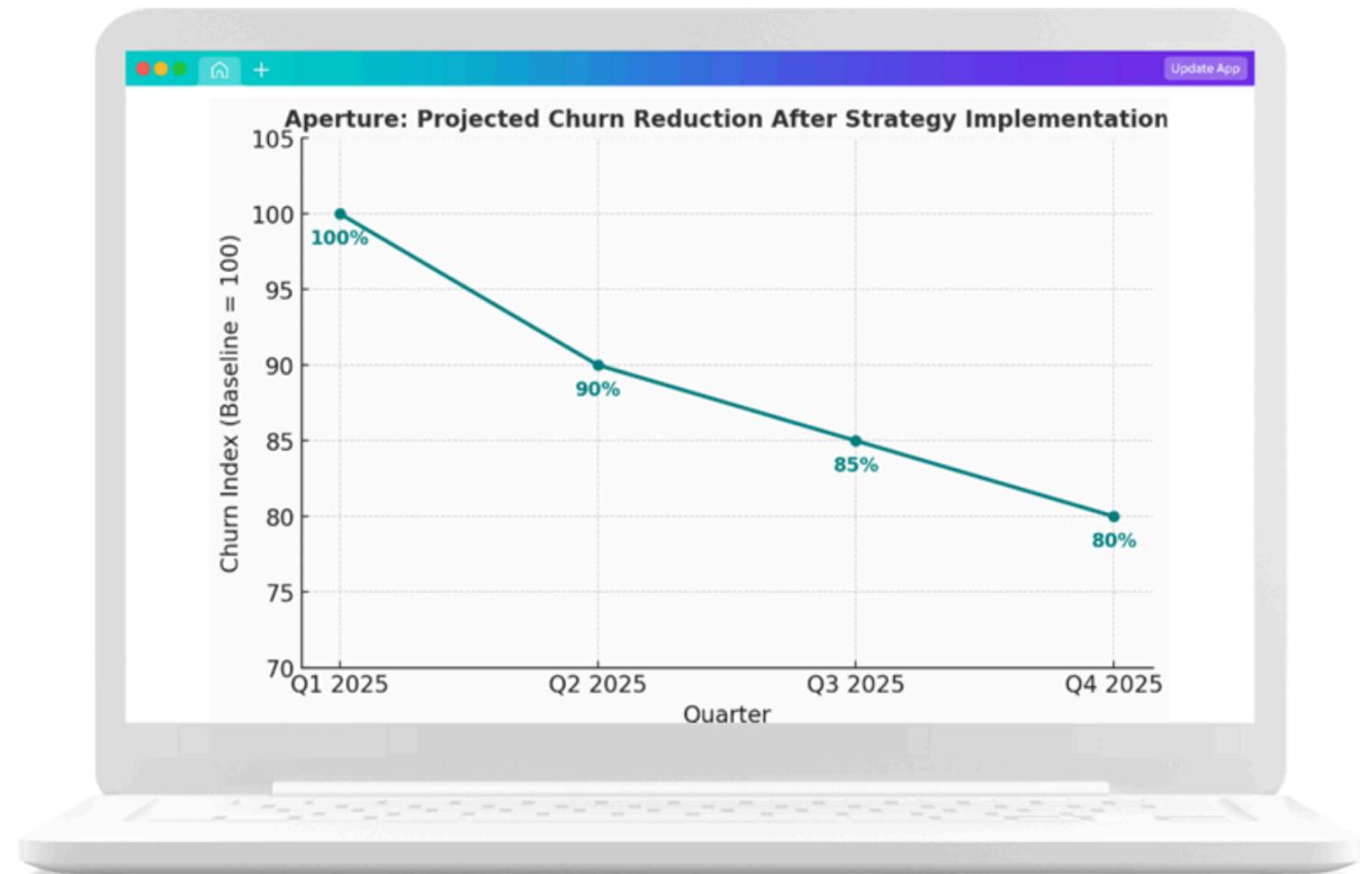
Validating After Development

4. Analyze user behavior:

Use analytics or visual tracking tools to see where users tap or get stuck.

5. Run A/B tests between old and new filters interface:

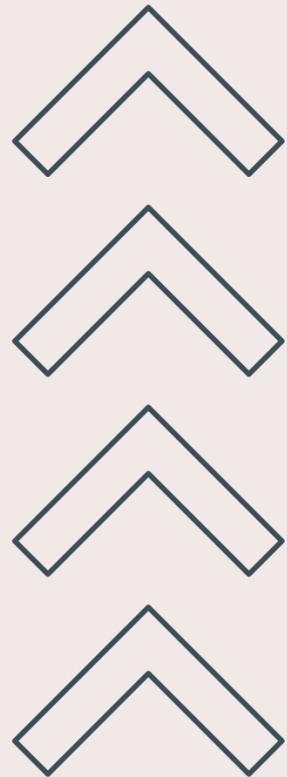
- Compare engagement, retention, and satisfaction.
- Identify which design drives more filter exploration.



RESULT FROM AB TESTING

User Group Testing Prototype A (User 1-3) and Prototype B (User 4-6):

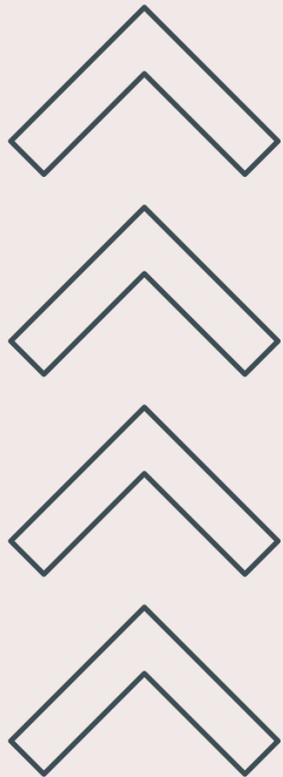
User	Prototype	Task 1	Task 2	Task 3	Observations
User 1	A				Mistook thumbs up for “most liked” and tick for “by Aperture”.
User 2	A				Didn't realize filters could be saved.
User 3	A				Confused by icons, needed help
User 4	B				Instantly understood bookmark icon
User 5	B				Found icons clearer but tooltip delay slightly long
User 6	B				Loved new badge icon for recommendations



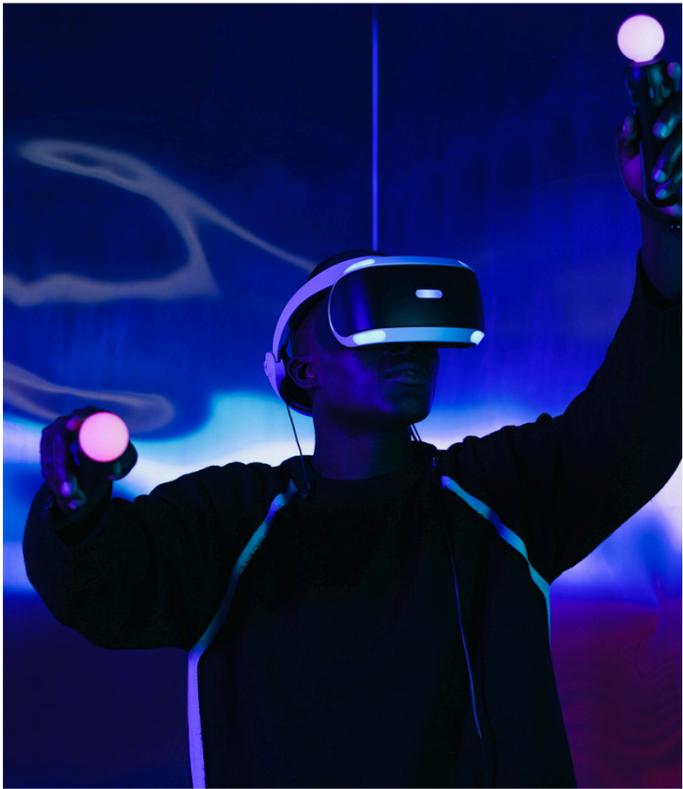
SUMMARY

This case study shows how I improved user engagement in Aperture by addressing a key usability gap in filter discovery. Research revealed that while filters strongly drive engagement, many users struggled to find and use them effectively.

I used user research, rapid prototyping, and usability testing to validate a focused solution that improved filter visibility and preview. The final design reduced friction in the editing flow and demonstrated measurable improvements in task success and engagement



Eva Kubendran Amos
evanjaline.kubendranamos@gmail.com



THANK
YOU