

Ad-Genie

AI-Powered Advertising & Deals Platform

Product Requirements Document

Version 1.0 | June 20, 2026

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Field	Value
Document Version	1.0
Date	June 20, 2026
Status	Draft
Platform	Web (Next.js on Netify)
Launch Scope	US-only — Target, Walmart, CVS, Macys, BestBuy
Offer Data Source	Rakuten Affiliate API

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1. Problem Definition

1.1 What Problem Is This Solving?

Online and offline shoppers at major retail chains (Target, Walmart, CVS) miss out on significant savings because discount discovery is **fragmented across dozens of apps, browser extensions, and physical flyers**. Finding the right offer at the right store — at the right moment — requires manual effort that most shoppers simply do not invest. Beyond discovery, sharing deals socially is an afterthought: there is no native experience for creating personalized, branded promotional content from a discount.

Ad-Genie solves both problems: it surfaces **location-aware deals** from major retailers in a single web-based feed, delivers them in the correct format for how the user intends to shop (online coupon code vs. in-store QR code), and lets users instantly generate **AI-powered promotional posters** — with on-demand hashtags they can copy and use anywhere on social media.

1.2 Who Are We Solving This Problem For?

Primary Persona

A value-conscious everyday shopper — online or offline — aged 22–45 who regularly shops at Target, Walmart, or CVS and wants to maximize savings without spending time hunting for coupons.

Key characteristics:

- Shopping mode: Mixed — some purchases are online, others in-store depending on category and urgency
- Behavior: Checks deal 2–5× per week; currently uses multiple apps (Honey, RetailMeNot, store apps); abandons coupons because redemption is confusing
- Pain: Finds the right deal too late; online codes don't work in-store; in-store barcodes can't be used at checkout online; misses location-specific promotions while physically near a store

Secondary Persona

A deal-sharing social shopper who enjoys posting savings tips and lifestyle content to Instagram. They want visually polished content — not a screenshot — and they want it in seconds.

1.3 Why Is This Problem Worth Solving?

- Location intelligence: Real-time proximity matching surfaces the most relevant offline offers first — a signal generic deal sites don't have.
- AI creative layer: The personalized poster generator (with user's profile photo) creates a sticky, shareable output that generic coupon apps cannot produce.
- Proprietary engagement data: Every coupon redemption, share event, and hashtag click is logged — building a dataset to optimize deal ranking and social reach that competitors cannot replicate.

1.4 Why Agentic AI?

- Unstructured retailer data: Offers from Target, Walmart, and CVS come in heterogeneous formats. Rule-based parsers cannot normalize across all three sources reliably.
- Creative generation: AI image generation (AI poster) requires multimodal reasoning — understanding the offer context, composing a visually compelling layout, and seamlessly incorporating the user's face.
- Hashtag generation: Effective Instagram hashtags require semantic understanding of the offer, retailer brand, product category, and trending tag patterns — tasks that require an LLM.
- Differentiation: Ad-Genie maintains user profile context (photo, location, shopping preferences) across sessions and applies it to every generated creative and every hashtag set — a personalized output that ChatGPT or Canva cannot replicate.

1.5 How Will We Know the Problem Is Solved? (Core Metrics)

North Star Metric: Weekly active coupon redemptions per user. Baseline: 0 (new product) | Target: ≥ 3 redemptions/user/week | Tracked via: redemption event log in Supabase

Metric	Baseline	Target	How Tracked
Coupon redemption rate	—	$\geq 35\%$ of surfaced coupons redeemed	Redemption event table
Total savings per user per month	—	$\geq \$25$	Savings calculation engine
AI poster downloads	—	≥ 1 download per active user per week	Download event log
30-day user retention	—	$> 50\%$	Auth + session logs
Offer load latency (P95)	—	$< 2s$ per location query	API timing logs
Hashtag copy rate	—	$> 60\%$ of generated sets copied	Clipboard event log

Metric	Baseline	Target	How Tracked
Site visits per week per user	—	≥4	Session event log
NPS	—	>45	In-app quarterly survey

2. Solution Definition

2.1 Pages & User Flows

The app has six distinct page types:

1. Landing page — public marketing page, unauthenticated
2. Auth pages — /signup and /login
3. Offers feed — location-aware deal discovery with online/offline toggle
4. Offer detail — coupon code (online) or QR code (offline) + poster generator
5. Dashboard — savings summary, coupon usage stats, activity history
6. Profile — user photo, preferences, linked accounts

Primary Flow (Deal Discovery & Redemption)

Landing page → Sign up / Log in → Offers Feed (location detected) → Browse Online or Offline Tab → Select Offer → View Coupon Code or QR Code → Redeem → Dashboard updated

Secondary Flow (Poster & Hashtags)

Offer Detail → Click "Generate My Ad Poster" → Preview poster with user's face → Download poster PNG → Click "Generate Hashtags" → Copy hashtag set

2.2 Technology User Flow

User Step	What Happens	Technology
Opens the app	Page served with routing and geolocation prompt	Next.js 14 (App Router)
Signs up / logs in	Auth with email/password; session persisted in localStorage	bcryptjs + Supabase (PostgreSQL)
Location detected	Coordinates matched to nearest Target, Walmart, CVS stores	Browser Geolocation API + Google Maps Places API
Views offer feed	Location-filtered offers fetched by category and store	Supabase + Rakuten Affiliate API

User Step	What Happens	Technology
Switches Online/Offline tab	Offer list filtered client-side by redemption type	React state
Views online offer	Coupon code displayed with one-tap copy; deep link to retailer checkout	Next.js page + Clipboard API
Views offline offer	QR code rendered in browser for user to show at store checkout	qrcode npm library
Generates AI poster	Photo + offer details sent to image API; poster previewed and downloaded	OpenAI GPT-Image (gpt-image-1) via server route
Requests hashtags	Offer metadata sent to LLM; set displayed as copyable chips	OpenAI GPT-4o via server route
Views dashboard	Savings, redemption counts, and history loaded from database	Supabase JS SDK
Updates profile	Photo uploaded and stored; used for all future poster generations	Supabase Storage

3. Feature Specifications

3.1 Offers Feed (/offers)

The primary screen post-login. Displays deals from Target, Walmart, and CVS filtered by the user's current location and organized into two tabs.

Location Detection

- On first load, request browser geolocation permission
- Match coordinates to nearest stores (up to 10 miles) using Google Maps Places API
- Display matched stores in a filter bar above the offer list (chips: All / Target / Walmart / CVS)
- Fallback: manual zip code entry if location permission denied

Online vs. Offline Tabs

Tab	What It Shows	Redemption Mechanism
Online	Deals redeemable at the retailer's website or app	Coupon code (alphanumeric, one-tap copy)
Offline	Deals redeemable in-store at nearby locations	QR code rendered in-app (≥240×240px)

Offer Card

Each card displays: store logo, offer headline, discount value (e.g. "20% off"), expiry date, category tag, and a "Get Offer" CTA. Online cards show a code badge; offline cards show a QR icon.

Filtering & Sorting

- Filter by: store (Target / Walmart / CVS), category (Grocery, Electronics, Health, Beauty, Home, Apparel), expiry (today / this week / this month)
- Sort by: savings value (highest first), expiry (soonest first), distance (nearest store first)

3.2 Online Offer Detail (/offers/[id] — online type)

- Display full offer headline, terms, and expiry
- Coupon code block: large monospaced display of the code with a one-tap "Copy Code" button; confirmation toast on copy
- Redemption event: log copy action to Supabase redemptions table (store, offer ID, timestamp, channel: "online")

- "Shop Now" deep link button → opens retailer product/category page in new tab
- Poster generation panel (see §3.4)

3.3 Offline Offer Detail (/offers/[id] — offline type)

- Display full offer headline, terms, and expiry
- QR code: rendered via qrcode library, encodes offer redemption URL or store-specific identifier; displayed at $\geq 240 \times 240$ px on a white background for scanner contrast
- Brightness tip shown below QR code: "Increase screen brightness for best scan results"
- Redemption event: log QR display to Supabase redemptions table (channel: "offline")
- Poster generation panel (see §3.4)

3.4 AI Poster Generation

Available on both online and offline offer detail pages.

Generation Flow

7. User clicks "Generate My Ad Poster"
8. If no profile photo exists → prompt to upload one (inline, non-blocking)
9. System sends to server route: user profile photo + offer headline + discount value + store brand colors
10. OpenAI GPT-Image (gpt-image-1) generates a styled poster with the user's face incorporated
11. Poster previewed in browser; user can regenerate (up to 3× per offer)
12. "Download" button saves poster as PNG to the user's computer

Poster Design Specification

Element	Specification
Dimensions	1080×1080px (Instagram square)
User photo placement	Circular crop, foreground centre-left
Offer text	Bold headline, discount callout, store logo
Brand palette	Matched to retailer (Target red, Walmart blue, CVS red/white)
Hashtags	Displayed at bottom as visual decoration
Watermark	"Made with Ad-Genie" small footer

3.5 On-Demand Hashtag Generation

Hashtag generation is user-initiated — the offer detail page shows a "Generate Hashtags" button. The app prompts the user: "Want hashtags for this offer?" and generates only on confirmation. No auto-generation on page load.

Generation Flow

13. User clicks "Generate Hashtags" on the offer detail page
14. Confirmation prompt shown (single click to confirm)
15. Offer metadata sent to GPT-4o server route (category, store, product keywords, discount %, current season)
16. Response: 15–20 hashtags displayed as copyable chips below the poster panel
17. "Copy All Hashtags" button — copies the full set to clipboard; logs copy event to Supabase

Output Format

- Mix of broad tags (#deals, #savemoney, #couponlife), retailer-specific tags (#TargetDeals, #CVSBeauty, #WalmartFinds), and product/category tags
- Displayed as individual pill chips — user can click individual chips to copy one at a time

System Prompt

"You are a social media strategist specializing in retail deal content. Given an offer's details, generate 15–20 Instagram hashtags that maximize reach. Mix 5 high-volume broad tags (#deals, #savemoney, #couponlife), 5 retailer-specific tags, and 5–10 product/category-specific tags. Return only the hashtags as a space-separated list with # symbols. Do not include explanations."

3.6 Dashboard (/dashboard)

Post-login home screen. Gives users a full picture of their savings activity.

KPI Cards (12 metrics)

KPI	Description	Update Cadence
Total savings (all-time)	Sum of discount values from all redeemed coupons	On session load
Savings this month	Sum of discounts redeemed in the current calendar month	On session load
Online coupons used	Count of online redemptions (all-time)	On session load

KPI	Description	Update Cadence
Offline coupons used	Count of in-store redemptions (all-time)	On session load
Active offers	Count of saved/bookmarked offers not yet redeemed	Real-time
Offers expiring today	Count of saved offers expiring within 24h	On session load
Favourite store	Store with most redemptions	On session load
AI posters generated	Total count of poster generations	On session load
Posters downloaded	Total count of poster download events	On session load
Savings streak	Current consecutive days with at least one redemption	On session load
Top category	Product category with highest cumulative savings	On session load
Average saving per coupon	Mean discount value across all redeemed coupons	On session load

Savings Chart

- Line chart: daily savings over the last 30 days (Recharts)
- Toggle: view by store (Target / Walmart / CVS / All)

Activity Feed

- Chronological list of the last 50 events: offer redeemed, poster generated, offer saved, hashtag copied
- Each event shows: store icon, offer headline, savings amount, timestamp
- "Load more" to fetch the next 50 events

3.7 User Profile (/profile)

Profile Photo

- Upload photo from device (JPEG/PNG, max 5MB)
- Circular crop preview shown inline
- Photo stored in Supabase Storage; referenced in all poster generation requests
- "Replace Photo" replaces the stored image and updates future poster generations
- Privacy note: Photo is used only for AI poster generation and never shared with third parties

Profile Fields

Field	Type	Required
Display name	Text	Yes
Email	Email	Yes (from signup, read-only)
Home zip code	5-digit zip	Optional (used as location fallback)
Favourite stores	Multi-select: Target / Walmart / CVS	Optional
Notification preferences	Toggle: deal alerts, expiry reminders	Optional

4. Functional Requirements

4.1 Complete Feature List

ID	Requirement	Priority	Notes
FR-001	Landing page with hero, features overview, and auth CTAs	P0	Redirect to /offers if already logged in
FR-002	User signup with email/password; stored in custom users table with bcrypt hash	P0	No Supabase Auth
FR-003	User login; userId + userEmail stored in localStorage	P0	Generic error message — no field enumeration
FR-004	Auth guard: all app routes redirect to /login if no userId in localStorage	P0	—
FR-005	Browser geolocation prompt on first load of /offers	P0	Fallback to zip code entry
FR-006	Google Maps Places API integration for nearest Target, Walmart, CVS within 10 miles	P0	—
FR-007	Offer feed with store filter chips (All / Target / Walmart / CVS)	P0	—
FR-008	Online / Offline tab toggle on offer feed	P0	Client-side filter
FR-009	Online offer detail page with coupon code display and one-tap copy	P0	Toast confirmation on copy
FR-010	Offline offer detail page with QR code rendered via qrcode library	P0	≥240×240px display
FR-012	Redemption events logged to Supabase on coupon code copy or QR display	P0	Channel: 'online' or 'offline'
FR-013	AI poster generation via OpenAI GPT-Image server route	P0	User photo + offer metadata as input
FR-014	Poster regeneration — up to 3 attempts per offer	P0	Counter shown in UI
FR-015	Poster download to device	P0	PNG format
FR-016	On-demand hashtag generation via GPT-4o — user-initiated only; confirmation prompt shown first	P0	15–20 tags per offer
FR-017	Hashtag copy-all button + individual chip copy; clipboard event logged to Supabase	P0	—
FR-021	Dashboard KPI card grid (12 metrics)	P0	See KPI table in §3.6

ID	Requirement	Priority	Notes
FR-022	Savings line chart (last 30 days, by store toggle)	P0	Recharts
FR-023	Dashboard activity feed (chronological, 50 events, load more)	P0	User-specific only
FR-024	Profile page with photo upload and circular crop preview	P0	Supabase Storage
FR-025	Profile fields: display name, email, home zip, favourite stores, notification prefs	P0	—
FR-026	Offer bookmarking (save for later) with expiry countdown on dashboard	P1	Supabase saved_offers table
FR-027	Offer filtering by category, expiry range, discount value	P1	—
FR-028	Offer sorting by savings value / expiry / distance	P1	—
FR-029	Expiry reminder via browser notification or email	P1	For saved offers expiring within 24h
FR-030	Savings streak tracker	P1	Consecutive days with ≥ 1 redemption
FR-034	Responsive web layout, desktop-first; usable on tablet and mobile browsers	P0	Web app — no native mobile build
FR-035	Logout — clears localStorage, redirects to /login	P0	—
FR-036	Password reset via email	P1	—

4.2 Non-Functional Requirements

- Performance: Offer feed loads within 2s (P95); poster generation completes within 15s (P95); QR code renders within 500ms
- Scalability: 500 concurrent users at MVP; scale to 5,000 via Vercel autoscaling and Supabase connection pooling in v1.1
- Security: TLS 1.3 in transit; AES-256 at rest; user photos stored in private Supabase Storage bucket with signed URLs; no credentials in client-side code
- Reliability: 99.5% uptime SLA; AI generation failures shown as user-facing messages with retry prompt
- Usability: Core flow (find offer → get coupon code or QR → download poster) completable in under 90 seconds by a first-time user on desktop
- Accessibility: WCAG 2.1 AA compliance; QR code displays meet minimum size requirements for all standard retail scanners
- Compliance: US-only at launch — user photos can be deleted on request; location data not persisted beyond the current browser session

5. Technical Requirements

5.1 Prompt Strategy

Task	Technique	Output
Hashtag generation	Few-shot prompting with offer metadata: category, store, discount %, product keywords	15–20 hashtags as space-separated list
Poster generation	Multimodal prompt: user image + structured offer brief (headline, store, discount, brand colours)	1080×1080px PNG via GPT-Image
Offer categorisation	Zero-shot classification of raw retailer offer text into category taxonomy	Category label + confidence score

5.2 Model Requirements

Criteria	Requirement
Hashtag + text model	OpenAI GPT-4o
Image generation model	OpenAI GPT-Image (gpt-image-1)
Context window (text)	≥128k tokens
Image generation latency target	<15s per poster
Text latency target	<5s per hashtag set
Cost target	<\$0.25 per hashtag generation; <\$1.00 per poster generation

5.3 Technology Choices

Item	What We Use	Why
Framework	Next.js 14 (App Router)	API routes + React in one repo; desktop-first responsive web application
Language	JavaScript (JSX)	jsconfig.json with @/* alias; compatible with existing team tooling
Styling	Tailwind CSS 3.x + CSS variables	Fast, consistent, responsive-first; ag- token prefix for design system
Text LLM	OpenAI GPT-4o	Best-in-class for structured text generation and semantic hashtag reasoning
Image generation	OpenAI gpt-image-1	Native multimodal image generation with reference photo support

Item	What We Use	Why
QR code	qrcode (npm)	Lightweight, no external API; SVG output for crisp on-screen display
Database	Supabase (PostgreSQL)	Real-time, JS SDK, Row-Level Security
File storage	Supabase Storage	Profile photos stored with private buckets + signed URLs
Auth	Custom users table + bcryptjs	Full control; no vendor lock-in; 12 bcrypt rounds
Location	Browser Geolocation API + Google Maps Places API	Nearest store detection within 10 miles
Charts	Recharts	Lightweight React charting for savings dashboard
Hosting	Vercel	Low ops overhead; Edge Functions for performance
Offer data	Rakuten MerchandiseSearch API	Structured deal feeds for Target, Walmart, CVS; free developer accounts
Poster download	Browser <a download> on a Blob URL	Standard web file download; no external API needed

5.4 Data Model (Core Tables)

Table	Key Columns
users	id (UUID PK), email (UNIQUE), password_hash, display_name, zip_code, favourite_stores (text[]), created_at
user_photos	id, user_id (FK), storage_url, uploaded_at
offers	id, store (target/walmart/cvs), type (online/offline), headline, discount_value, category, coupon_code, qr_value, expires_at, is_active
saved_offers	id, user_id (FK), offer_id (FK), saved_at — UNIQUE(user_id, offer_id)
redemptions	id, user_id (FK), offer_id (FK), channel (online/offline), savings_amount, redeemed_at
posters	id, user_id (FK), offer_id (FK), storage_url, generated_at
hashtag_sets	id, user_id (FK), offer_id (FK), hashtags (text[]), generated_at, copied_at
download_events	id, user_id (FK), offer_id (FK), downloaded_at
hashtag_copy_events	id, user_id (FK), hashtag_set_id (FK), copied_at

6. Roadmap

Release	Features	Duration	Priority
v0.1 — Internal Alpha	Landing page, auth (signup/login), geolocation + store matching, offer feed with online/offline tabs, coupon code display, QR code rendering	3 weeks	P0
v0.2 — Closed Beta	Redemption event logging, on-demand hashtag generation (user-initiated), AI poster generation with user photo and PNG download, profile page with photo upload	3 weeks	P0
v1.0 — Public Launch	Dashboard (12 KPIs + savings chart + activity feed), offer bookmarking, expiry reminders, savings streak, offer filtering/sorting, performance optimisation, security audit	4 weeks	P0
v1.1 — Growth	Loyalty card integrations (Target Circle, Walmart+, CVS ExtraCare), browser and email notifications for expiring offers, password reset, offer personalisation based on redemption history	6 weeks	P1
v2.0 — Scale	Personalised offer ranking (ML model), multi-city support, group deals & social gifting, brand partnership ads, affiliate revenue layer, advanced savings analytics	Q4 2026	P2

7. Risks & Dependencies

Risk	Likelihood	Impact	Mitigation
Retailer offer APIs are unstable or rate-limited	High	High	Cache offers in Supabase with TTL; implement retry + exponential backoff; fallback to last-known offers with staleness indicator
GPT-Image returns poster that doesn't incorporate user photo correctly	Medium	Medium	Validate output with face-detection check; re-prompt automatically on failure; offer manual crop tool as fallback
Location permission denied by user	High	Medium	Fallback to zip code entry; surface home zip from profile
QR code not accepted at checkout (scanner calibration, low brightness)	Medium	High	Display brightness tip prominently; also show the raw redemption code as a text fallback
User photo storage raises privacy concerns	Medium	High	Store in private bucket with signed URLs; show clear consent copy; one-click photo deletion in profile
OpenAI image generation costs exceed budget at scale	Low	Medium	Per-user generation limits (3 posters/day free; unlimited on paid plan); cache generated posters per offer per user
Offer data contains expired or incorrect discounts	High	Medium	TTL-based offer freshness; report-an-issue button on each offer card

8. Evaluations

8.1 Evaluation Plan

Eval Type	Method	Target	Cadence
Poster quality (user-rated)	In-app thumbs up/down after poster preview	≥80% positive	Weekly post-beta
Hashtag relevance	Copy rate as a proxy for quality	>60% copy rate	Weekly
QR scan success rate	User-reported via 'Did this work?' prompt after showing QR	>95% successful scans	Per release
Offer accuracy	Spot check: is the coupon code / discount valid at retailer?	>95% valid	Weekly
Poster generation latency (P95)	Server-side timing log	<15s	Per release, automated
Hashtag generation latency (P95)	Server-side timing log	<5s	Per release, automated
Offer load latency (P95)	API timing log	<2s	Per release, automated
Poster download rate	Posters generated vs. posters downloaded	>70%	Weekly post-launch

8.2 Launch Criteria

Stage	Go Criteria
Alpha (10 internal users)	All P0 flows end-to-end functional; QR renders correctly on desktop and mobile browsers; poster generation returns valid image
Beta (100 users)	Poster quality rating ≥75% positive; QR scan success rate >90%; offer latency <2s P95; hashtag copy rate >50%
Public launch	Poster quality ≥80%; QR scan success >95%; offer accuracy >95%; security audit passed; 30-day retention >45%

9. Responsible AI

Pillar	Strength	Risk	Mitigation
Helpful	Surfaces personalized, location-aware savings; generates shareable social content instantly	AI poster may not accurately represent offer terms	Offer headline and discount value always displayed as text alongside poster; poster is cosmetic, not authoritative
Honest	Offers are sourced from retailers' own data feeds; expiry dates are clearly displayed	Outdated offers may appear valid	TTL-based cache invalidation; 'Verify at store' disclaimer on every offer
Harmless	Consumer savings app with no financial transaction capability	User photo used in AI image generation without awareness of output	Explicit consent before first poster generation; photo deletion available at any time in profile

Disclaimers

Offer disclaimer: *"Offers are subject to retailer terms and availability. Always verify the discount is active before completing your purchase."*

Photo consent (shown before first poster generation): *"Your profile photo will be used to create a personalized AI poster. It is stored securely and never shared with third parties. You can delete your photo at any time in Profile settings."*

10. Pricing

10.1 Development Costs (MVP)

Item	Estimated Cost
OpenAI API credits — GPT-4o + GPT-Image (dev + test)	\$800
Google Maps Places API (dev + test)	\$150
Supabase Pro (3 months)	\$75
Vercel Pro (3 months)	\$60
Security pentest	\$2,000
Miscellaneous (domains, monitoring)	\$200
Infrastructure subtotal	\$3,285
Lead Full-Stack Engineer (3 months)	\$25,000
AI / Backend Integration Engineer (3 months)	\$20,000
Product Manager (3 months)	\$15,000
UX / Web Designer (3 months)	\$10,000
QA Engineer (part-time, 3 months)	\$6,000
Manpower subtotal	\$76,000
TOTAL MVP	~\$79,285

10.2 Operational Costs (1,000 Active Users/Month)

Item	Monthly Cost
OpenAI GPT-4o (hashtag generation — 10,000 calls × ~\$0.01)	\$100
OpenAI GPT-Image (poster generation — 5,000 posters × ~\$0.08)	\$400
Google Maps Places API (50,000 location queries × \$0.002)	\$100
Supabase Pro	\$25
Vercel Pro	\$20
Supabase Storage (profile photos + posters)	\$15
Monitoring (Sentry)	\$26
TOTAL	~\$686/month

Cost per active user: ~\$0.69/month infrastructure — well within margin for paid tiers.

10.3 Pricing Tiers

Plan	Price	Includes	Target User
Free	\$0	10 offers/day, 1 poster/day, 5 hashtag generations/month	Casual saver
Saver	\$4.99 / month	Unlimited offers, 5 posters/day, unlimited hashtag generations, expiry alerts	Regular deal hunter
Pro	\$9.99 / month	Everything in Saver + loyalty card integrations, poster history, priority support	Power user / deal blogger

11. Open Questions — Resolved

All six open questions have been answered. Decisions are recorded below.

#	Question	Decision	Impact
OQ-001	Retailer offer data source	Affiliate network (Rakuten / CJ Affiliate). Use structured deal feeds via Rakuten for MVP — Target, Walmart, and CVS are all on the Rakuten network.	Updates tech stack: add Rakuten MerchandiseSearch API client. Offers may lag up to a few hours; add staleness indicator on cards.
OQ-002	Instagram integration	No Instagram integration at any version. Ad-Genie generates the AI poster (downloadable PNG) and a copyable hashtag set. The user posts to Instagram manually.	Removes FR-018, FR-019, FR-020 from scope. Simplifies poster flow to: Generate → Preview → Download → Copy hashtags.
OQ-003	Barcode format	QR code only. No 1D barcode. All offline offers show a QR code rendered via the qrcode library at ≥240×240px on a white background.	Removes jsbarcode from the dependency list. Simplifies offline offer detail page.
OQ-004	User photo privacy & GDPR	US-only launch; US Supabase Storage region. No GDPR compliance required at MVP. EU data residency deferred to v1.1.	No EU infrastructure setup needed for MVP.
OQ-005	Affiliate revenue	Out of scope for POC. Consumer persona only. No 'Shop Now' affiliate tracking,	Removes affiliate link tracking. 'Shop Now' button is a plain external link with no attribution.

#	Question	Decision	Impact
		no commission infrastructure.	
OQ-006	Hashtag generation trigger	User-initiated (opt-in). The app shows a prompt 'Want hashtags for this offer?' and generates only if the user confirms.	Updates FR-016: hashtag generation is on-demand, not automatic.

12. Assumptions

- Ad-Genie is a web application delivered via browser (Next.js on Vercel). No native iOS or Android app is in scope.
- Retailer offer data is sourced via Rakuten affiliate API with ≤ 4 h staleness acceptable for MVP.
- There is no Instagram integration at any version; users download the poster PNG and post manually.
- Offline offers use QR code only (no 1D barcode). QR code is rendered in the browser; the user shows the screen at the retail checkout.
- OpenAI GPT-Image (gpt-image-1) can incorporate a provided reference photo into a generated poster adequately for MVP; no custom fine-tuning required.
- Hashtag generation is user-initiated; no auto-generation on page load.
- US-only launch; no GDPR infrastructure required at MVP.
- User is responsible for verifying offer validity at point of sale; Ad-Genie is not liable for rejected coupons.
- Team size for MVP: 3–4 engineers. Timeline: 10 weeks from kickoff (v0.1: 3w, v0.2: 3w, v1.0 hardening: 4w).
- Dashboard KPI data is derived from existing Supabase tables on read (no separate analytics table in MVP).