

CarDoc

AI used-car inspection from buyer's phone photos — paint mismatch + panel gaps + undercarriage anomalies. Used-car fraud is rampant in India; physical inspectors slow + expensive. ■499 per check.

Category	Set 7 · Verticals & Creator
Customer	Indian used-car buyers (private + dealer purchases) wanting structured pre-purchase inspection; small used-car dealers wanting per-listing inspection certification
Monetisation	■499 per check Standard · ■999 Premium (with on-site physical inspector dispatch) · ■3,999/mo dealer (50 checks/month + white-label)
Build effort	Med
Plan version	v1.0 — 2026-05

Executive Summary

CarDoc is an AI-driven used-car inspection service for India's ~4.5M annual used-car transactions. The structural problem: used-car fraud is rampant (~30-40% of used-car transactions have material undisclosed issues — accident history hidden via paint + panel work + undercarriage damage + odometer rollback + flood damage). Physical pre-purchase inspectors exist (Spinny + Cars24 do in-house inspection on their listings; independent inspectors charge ■2,500-8,000 + 2-3 day turnaround) but inaccessible economically for the casual buyer + slow for time-sensitive deals.

Product: buyer photographs car comprehensively (15-30 photos covering exterior + interior + engine bay + undercarriage + specific common-issue zones); AI processes within 6 hours producing structured inspection report — issue identification + severity + likely-significance + recommended action.

Year-1 target: 18,000 paid checks + 80 dealer subscriptions generating ■1.4 crore annual revenue against ■28 lakh costs. Cash-positive month 3.

The Problem

Indian used-car market: ~4.5M annual transactions; ~₹3,00,000 crore annual transaction value. Quality discovery is broken: ~30-40% of transactions have material undisclosed issues including accident history (with hidden repair work), odometer rollback, flood damage, fire damage, undercarriage damage, mismatched paint work indicating panel replacement.

Existing options. Spinny + Cars24 + CARS24-style platforms do inspection on listings sold through their platform — but their take rate + inventory restrictions mean many private + dealer transactions happen outside. Independent inspectors charge ₹2,500-8,000 with 2-3 day scheduling friction. Most buyers either skip inspection (40-60% of private transactions) or rely on seller's claims + Google research.

Market gap: a structured AI-driven inspection at accessible price (₹499) + fast turnaround (6 hours) that enables casual buyers to inspect before purchase.

The Solution

CarDoc's flow. Buyer photographs car via mobile app (guided photo workflow with overlay + checklist of 18-25 required shots covering exterior panels + interior + engine bay + undercarriage + tyre tread + common-issue zones). Within 6 hours, AI returns structured inspection report: issue identification (paint mismatch flagged at 3 panels suggesting recent repair work; panel-gap anomaly at front right indicating possible accident repair; undercarriage rust at expected pattern for 6-year-old car), severity assessment, likely-significance, recommended action (proceed with caution + negotiate price down by X / get physical inspector / walk away).

Premium tier (₹999): includes Standard + on-site physical inspector dispatch within 24-48 hours. AI-driven preliminary + human-driven verification of flagged items.

Dealer subscription (₹3,999/mo for small dealers, 50 checks/month + white-label): for small used-car dealers wanting per-listing inspection certification as buyer-trust differentiator. CarDoc-verified branding.

Three structural differences. First, AI-first speed (6 hours vs. 2-3 days for physical). Second, accessible pricing (₹499 vs. ₹2,500-8,000). Third, India-specific issue patterns (paint mismatch detection tuned to common Indian repair shop practices + undercarriage corrosion patterns tuned to Indian climate + flood-zone detection).

Market Opportunity

Indian used-car market: ~4.5M annual transactions. Willing-to-pay segment for pre-purchase inspection: ~1.2-1.8M buyers annually.

At ₹650 average revenue per buyer + dealer-subscription tier, SAM is ~₹900-1,300 crore. Realistic 3-year capture: 0.5-2% = ₹4.5-26 crore annual revenue.

Adjacent expansion. Year 2: post-purchase warranty service (buyers want warranty after purchase; CarDoc can broker). Insurance partnership (CarDoc inspection report supports insurance underwriting). Year 3: trade-in valuation tool (sellers want trade-in price estimation; AI-driven valuation).

Target Customer

Primary persona: a 34-year-old IT professional in Bengaluru considering ₹6 lakh used Maruti Brezza from private seller. Will pay ₹499 Standard for AI inspection before committing.

Secondary persona: a 42-year-old buyer considering ₹14 lakh used Toyota Innova from dealer. Will pay ₹999 Premium for AI + physical inspector verification on higher-value transaction.

Tertiary persona: a 38-year-old small used-car dealer in Pune with 25-listing inventory. Will pay ₹3,999/mo dealer subscription for CarDoc-verified-branding on listings.

Product

Photo workflow: 18-25 guided photos via mobile app with overlay + checklist.

AI inspection: 6-hour processing producing structured report.

Issue identification: paint mismatch + panel gaps + undercarriage corrosion + tyre wear patterns + interior condition + engine bay anomalies.

Severity + significance assessment + recommended action.

Premium tier: on-site physical inspector dispatch (24-48 hours).

Dealer subscription: 50 checks/month + white-label reports + per-listing certification branding.

Technical Architecture

Frontend: React Native mobile (mobile-primary for photo capture).

Backend: Python on Hetzner cloud + GPU box for image analysis.

AI models: custom-trained on car-damage-detection dataset + GPT-4o for contextual reasoning + India-specific issue-pattern fine-tuning.

Inspector network (Premium): vetted inspector contractors in 12 cities.

Payments: Razorpay.

Business Model & Unit Economics

Three tiers. Standard ₹499 per check. Premium ₹999 per check (Standard + on-site inspector). Dealer subscription ₹3,999/mo (50 checks/month + white-label).

Conversion: SEO + content-marketing drives high-intent traffic; converts at 9% of trial users. Distribution: 78% Standard, 18% Premium, 4% Dealer subscription.

Gross margin: Standard 88%; Premium 55% (inspector cost); Dealer 82%. Blended ~80%.

Unit Economics (Year-1 base case)

Year-1 paid checks	18,000
Year-1 dealer subscriptions	80
Year-1 revenue	₹1.4 crore
Gross margin	80%
CAC	₹120
Year-1 all-in costs	~₹28 lakh
Year-1 net contribution	~₹90 lakh

Go-to-Market

Channel 1 — SEO (45%): high-intent used-car-inspection queries.

Channel 2 — Used-car-buyer community (25%): r/IndianAutos + car-enthusiast FB groups + OLX + Quikr-adjacent audiences.

Channel 3 — Dealer partnerships (20%): direct outreach to small used-car dealers.

Channel 4 — Paid acquisition (10%).

Roadmap (first 12 months)

- Month 1-3: MVP with photo workflow + AI inspection + Standard tier. 1,200 paid checks.
- Month 4-5: Premium tier with inspector dispatch (initial 6 cities), 5,000 paid checks.
- Month 6-8: Dealer subscription + white-label, 11,000 paid checks + 40 dealer subscriptions.
- Month 9-10: Expansion to 12 cities + post-purchase warranty integration, 15,000 paid checks.
- Month 11-12: 18,000 paid checks + 80 dealer subscriptions, ₹1.4 crore year-1 revenue.

Key Risks

- AI inspection accuracy: false negatives are severe (buyer misses critical issue). Mitigated by conservative thresholds + clear scope-disclaimers + Premium-tier human-verification escalation.
- Spinny + Cars24 + CarTrade response: incumbents could launch open-market inspection. Mitigated by accessible pricing + speed.
- Liability if missed issue causes buyer loss: substantial legal exposure. Mitigated by professional indemnity + scope-disclaimers + escalation discipline.
- Inspector-network coverage: Premium-tier requires geographic coverage. Mitigated by phased city expansion.
- Photo-quality variance: poor buyer photography reduces AI accuracy. Mitigated by guided workflow + retry mechanism.