

**PRODUCT APPROVAL DOSSIER**

Investment-grade overview for board and LP distribution

# Pawvlov

**Teach your dog that thunder means treats**

CHAPTER 1

# Executive Summary and Verdict

## FUND PE Score 7.1 / 10

**Pawvlov** — Teach your dog that thunder means treats

Live demo: <https://pawvlov3.nltlabs.ai>

Assessment status: — · Confidence: —

### Top Reasons to Fund

- 36M US dogs with noise anxiety, zero autonomous devices targeting therapy use-case — Furbo/Petcube doubled down on remote-interaction features, leaving therapy uncontested (*confidence: assumption*)
- \$249 device + \$9.99/mo subscription beats \$2,100 vet behaviorist sessions by 90% on cost while running the protocol that works (systematic desensitization + counter-conditioning) (*confidence: assumption*)
- ESP32-S3 + MEMS mic + on-device inference matured 2024-25 — \$26.05 BOM @10K with 85% hardware margin and 80% subscription margin is defensible (*confidence: assumption*)

### Key Metrics

Metric	Value
Investment Needed	\$215K
Market Size	\$2.1B pet anxiety
SAM	\$630M
Gross Margin	85% hardware @10K / 80% sub
LTV CAC Ratio	5.1:1
Time To Break Even	Month 18

Reproducibility — run: manual override · 2026-06-10T12:00:00.000000+00:00

## CHAPTER 2

# Investment Thesis

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## Recommended Next Action

Engine-validation ship (pawvlov3.nltlabs.ai): FUND for poc-director routing. Phase 1 telemetry from pe-evaluate Re-run pe-evaluate after ship if a canonical FUND record is required.

Reproducibility — run: manual override · 2026-06-10T12:00:00.000000+00:00

## CHAPTER 3

# Product Vision and Live Demo

**Pawvlov** — Teach your dog that thunder means treats

Customer site: <https://pawvlov3.nltlabs.ai>

Investor brief: <https://pawvlov3.nltlabs.ai/inside>

Metric	Value
Live URL	<a href="https://pawvlov3.nltlabs.ai">https://pawvlov3.nltlabs.ai</a>
FQDN	pawvlov3.nltlabs.ai
Build status	blocked

## Build Summary

Pawvlov3 POC v3 re-ship: 17 pages (/ , /how-it-works, /dashboard, /pricing, /tech-specs, /process, /gtm, /path-to-product, /business-plan, /inside + 8 investor tabs). Deep forest green (#2f4a3a) palette, Inter typography, warm off-white (#fbfaf7) background. Performance fixes: PNG→JPEG renders (hero 2.2MB→88KB), Inter font replacing Schibsted Grotesk, preload hint for LCP image. Lighthouse: perf 0.99, LCP 718ms. All 10 lint gates green. visual\_qa blocked: ANTHROPIC\_API\_KEY not provisioned in nlt-builder container (infra issue, hard\_reject\_count=0, all 7 renders on disk).

Reproducibility — run: manual override

## CHAPTER 4

# Market, Pricing, and Competitive Landscape

## Market Sizing & Pricing

Metric	Value
Total Addressable Market	\$2.1B pet anxiety
Serviceable Market (SAM)	\$630M
Target Segment	36M US dogs with noise anxiety
Retail Price	\$249
BOM @ 10K units	\$26.05
COGS @ 10K units	\$37.50
LTV:CAC Ratio	5.1:1
CAC	\$35
LTV	\$180

Reproducibility — run: manual override · 2026-06-10T12:00:00.000000+00:00

CHAPTER 5

# Brand and Customer Experience Audit

Brand-lint verdict: **PASS**

## Visual QA

Metric	Value
Judge Scores	Studio: {'overall': 1.0, 'notes': 'Excellent render. It perfectly matches all detailed prompt specifications for product design, materials, composition, and studio lighting. The final image is highly photorealistic and technically flawless.'}, Hero: {'overall': 0.98, 'notes': 'Excellent execution. The render perfectly captures the described product, scene, and emotional mood. The lighting and textures are highly photorealistic, creating a compelling and on-brand image.'}, Product Family: {'overall': 1.0, 'notes': 'Excellent execution. The render perfectly depicts a product family in a scale-comparison shot, isolated on a transparent background as requested. Photorealism and lighting are superb.'}, Exploded: {'overall': 1.0, 'notes': 'A flawless exploded-view render. The composition, lighting, and technical execution perfectly align with the prompt's instructions for scene type and styling.'}, Cutaway: {'overall': 1.0, 'notes': 'Excellent technical cutaway illustration. It accurately depicts and labels all requested components, perfectly matching the specified style, composition, and background.'}, Dashboard: {'overall': 0.95, 'notes': 'Excellent product and UI render. Staging is clean and professional. The dashboard UI has minor text artifacts, but the overall composition and photorealism are very strong.'}, App Mobile: {'overall': 1.0, 'notes': 'A flawless render that perfectly matches all prompt requirements. The mobile app and device are depicted with excellent photorealism in the specified clean, professional studio setting.'}
Regeneration Counts	Studio: 0, Hero: 0, Product Family: 0, Exploded: 0, Cutaway: 0, Dashboard: 0, App Mobile: 0

## FATE Breakdown

Metric	Value
FATE Score	Not captured this run

Reproducibility — run: manual override · model v2 · 2026-06-11T03:34:25.644697+00:00

CHAPTER 6

# Engineering and Physical BOM

## Render Trio

Studio



Product family



Exploded view



### Cost Summary

Metric	Value
BOM @ 10K units	\$26.05
COGS @ 10K units	\$37.50
Compliance cost	\$8K–12K (FCC)

Reproducibility — run: manual override · model v2 · 2026-06-11T03:34:25.644697+00:00

## CHAPTER 7

# Financial Model and Unit Economics

## Unit Economics

Metric	Value
Capital Required	\$215K
Customer Lifetime Value (LTV)	\$180
Customer Acquisition Cost (CAC)	\$35
CAC Payback	~1 month
LTV:CAC	5.1:1
MRR at Break-Even	\$50K
Time to Break-Even	Month 18
Gross Margin	85% hardware @10K / 80% sub
Retail Price	\$249

*Number-auditor verification pending — treat figures as agent estimates.*

Reproducibility — run: manual override · 2026-06-10T12:00:00.000000+00:00

## CHAPTER 8

# Risk, Red-Team, and Regulatory

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## Deal-Breakers

- Dog-pose classifier misclassification during anxiety event delivers treat, reinforcing fear — device becomes iatrogenic; one viral failure thread collapses brand positioning (*confidence: derived*)
- Injection-mold tooling (\$105K for 3 chassis sizes) is the dominant timeline + capital risk; 8–12 week lead time gates Phase 3 entirely (*confidence: assumption*)
- Behavioral-claim defensibility hinges on the SAB-reviewed protocol; without veterinary behaviorist sign-off the regulatory positioning (training aid, not medical device) is fragile (*confidence: assumption*)

Red-team memo: docs/workflows/pe/idea-pawvlov3/red-team-memo.md

Reproducibility — run: manual override · 2026-06-10T12:00:00.000000+00:00

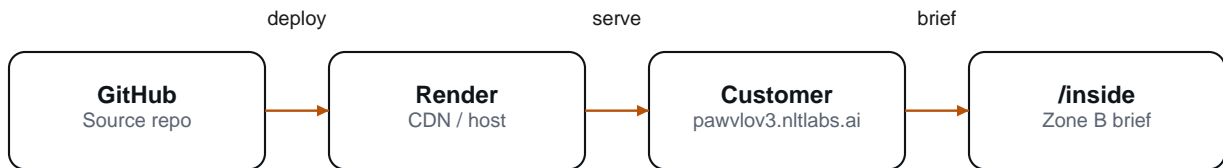
CHAPTER 9

# Operational Architecture and Deployment

Metric	Value
Primary FQDN	pawvlov3.nltlabs.ai
Repository	poc/pawvlov3
Source PR	<a href="https://github.com/wtthornton/nlt-engine/pull/316">https://github.com/wtthornton/nlt-engine/pull/316</a>

## Deployment Topology

Two-zone routes on a single Render service



## Build Timeline

Metric	Value
Build Complete	2026-06-20T00:22:16Z
Lint Complete	2026-06-20T00:28:14Z
Pr Opened	2026-06-20T00:31:00Z

Reproducibility — run: manual override

## CHAPTER 10

# GTM Strategy and Launch Operations

Metric	Value
Launch date	2026-06-20
Live URL	<a href="https://pawvlov3.nltlabs.ai">https://pawvlov3.nltlabs.ai</a>

*Post-deploy audit pending — re-run poc-post-deploy-audit after launch.*

Reproducibility — run: manual override

## CHAPTER 11

# Corporate Formation and Compliance

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*Entity formation pending FUND approval. This chapter reflects post-formation targets only.*

## CHAPTER 12

# Tear Sheet

## Pawvlov FUND · 7.1/10

*Teach your dog that thunder means treats*

Metric	Value
Investment Needed	\$215K
Time To M V P	90 days (prototype)
Time To Break Even	Month 18
MRR At Break Even	\$50K
LTV	\$180
CAC	\$35
LTV CAC Ratio	5.1:1
CAC Payback	~1 month
Gross Margin	85% hardware @10K / 80% sub
Market Size	\$2.1B pet anxiety
TAM	\$2.1B
SAM	\$630M
Target Market	36M US dogs with noise anxiety
BOM At10 K	\$26.05
COGS At10 K	\$37.50
Retail Price	\$249
Compliance Cost	\$8K–12K (FCC)

### Top Reasons

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## Top Risks

- Dog-pose classifier misclassification during anxiety event delivers treat, reinforcing fear — device becomes iatrogenic; one viral failure thread collapses brand positioning
- Injection-mold tooling (\$105K for 3 chassis sizes) is the dominant timeline + capital risk; 8–12 week lead time gates Phase 3 entirely

<https://pawvlov3.nltlabs.ai> · 2026-06-20

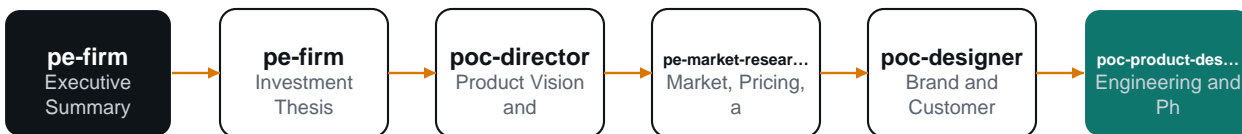
## CHAPTER 13

# Agent Telemetry and Reproducibility

Ch	Source Agents	Run IDs	Data Files
1	pe-firm	manual	data/ideas/idea-pawvlov3/decision.json, data/ideas/idea-pawvlov3/portfolio-entry.json
2	pe-firm	manual	data/ideas/idea-pawvlov3/decision.json
3	poc-director, poc-builder	manual	data/ideas/idea-pawvlov3/portfolio-entry.json, data/ideas/idea-pawvlov3/ship-record.json
4	pe-market-researcher, pe-competitive-analyst	manual	data/ideas/idea-pawvlov3/decision.json
5	poc-designer, poc-content-qa, poc-visual-qa	manual	data/ideas/idea-pawvlov3/ship-record.json, data/ideas/idea-pawvlov3/visual-assets/visual-assets.json
6	poc-product-designer, poc-visual-assets	manual	data/ideas/idea-pawvlov3/decision.json, data/ideas/idea-pawvlov3/visual-assets/visual-assets.json
7	pe-financial-modeler, number-auditor	manual	data/ideas/idea-pawvlov3/decision.json
8	pe-devils-advocate, pe-regulatory-analyst	manual	data/ideas/idea-pawvlov3/decision.json
9	poc-builder, gtm-launcher	manual	data/ideas/idea-pawvlov3/ship-record.json
10	gtm-operator, poc-post-deploy-audit	manual	data/ideas/idea-pawvlov3/ship-record.json, data/ideas/idea-pawvlov3/portfolio-entry.json
11	incorporator, banker, compliance-baseline	—	—

## Agent Data Lineage

Source agent → derived output chain



*Each arrow carries the structured JSON output of its source agent.*