

POLARITY LAB

FINANCIALS & UNIT ECONOMICS

Q1 2026



Page 1 of 34



WHAT WE'VE BUILT

2

PATENTS

23

CLAIMS

4

PRODUCTS

1

BUILDER

Patent-protected framework. Full product suite. Zero funding.



WAXFEED PRODUCT STATUS

CORE FEATURES

Album reviews (0-10 scale)
User profiles + social graph
Activity feed + discovery
Friends + following system

DIFFERENTIATORS

TastelD cognitive profiling
First Spin badge system
Wax economy + tipping
Real-time messaging + rooms

Complete feature set. Stripe payments live.



TECH STACK

FRONTEND

Next.js 16

React 19

Tailwind CSS

Framer Motion

BACKEND

PostgreSQL (Neon)

Prisma ORM

NextAuth v5

Stripe + webhooks

Spotify API – Genius API – Cloudinary – Vercel



INFRASTRUCTURE COSTS

SERVICE	MONTHLY COST	NOTES
Vercel Pro	\$20	Hosting + edge functions
Neon PostgreSQL	\$19	Serverless database
Cloudinary	\$0	Free tier sufficient
Stripe	2.9% + \$0.30	Per transaction
Domain + DNS	~\$2	Amortized

~\$41/month fixed. Variable costs scale with revenue.

GROSS MARGIN ANALYSIS

REVENUE STREAM	PRICE	COGS	GROSS MARGIN
Waxfeed+ Monthly	\$4.99	\$0.45	91%
Waxfeed+ Annual	\$47.88	\$5.00	90%
Station Plan	\$19.99	\$1.00	95%
Wax Pax (avg)	\$8.99	\$0.90	90%

COGS: payment processing + marginal compute

WAXFEED+ ECONOMICS

MONTHLY

Price: \$4.99

Payment processing: \$0.45

Server costs: ~\$0.05

Gross profit: \$4.49

Margin: 90%

ANNUAL

Price: \$47.88 (\$3.99/mo)

Payment processing: \$1.69

Server costs: ~\$0.60

Gross profit: \$45.59

Margin: 95%



STATION PLAN ECONOMICS

\$19.99/month per station team

COMPONENT	VALUE
Payment processing	\$0.88
Additional compute	\$0.12
Gross profit	\$18.99
Gross margin	95%

B2B pricing at consumer scale. Higher ARPU, lower CAC.

WAX PAX PRICING

PACK	WAX	PRICE	\$/WAX	MARGIN
Starter	100	\$0.99	\$0.0099	85 %
Standard	500	\$3.99	\$0.0080	88 %
Premium	1,500	\$9.99	\$0.0067	90 %
Collector	5,000	\$24.99	\$0.0050	92 %

Volume discount incentivizes larger purchases. Zero marginal cost.

WAX UTILITY

What users spend Wax on:

- **Tipping reviews** – social currency transfer
- **Boosting reviews** – visibility in feed
- **Cosmetic items** – badges, profile frames
- **Username changes** – \$4.99 equivalent

Virtual goods. 100% gross margin after payment processing.

CAC BY CHANNEL

CHANNEL	CAC	METHOD	SCALABILITY
College radio	\$0.50	Direct outreach	100K users
Music Twitter	\$0	Viral badges	Unknown
Reddit organic	\$0	Community seeding	Medium
Meta/Instagram	\$3.20	Paid acquisition	High
TikTok	\$2.80	Spark Ads	High

Power law: one channel will drive 80% of growth.

COLLEGE RADIO CAC

\$0.50 per user

COST COMPONENT	AMOUNT
Station outreach	\$0 (founder time)
Founding program perks	\$25 Wax × users
Setup support	\$0 (self-serve)
Blended CAC	\$0.50

Distribution moat. Competitors can't replicate access.

PAID ACQUISITION ECONOMICS

META/INSTAGRAM

CPC: \$0.80

Landing conversion: 25%

CAC: \$3.20

LTV/CAC: 17x

TIKTOK

CPC: \$0.70

Landing conversion: 25%

CAC: \$2.80

LTV/CAC: 19x

Unit economics support paid scale.

LTV CALCULATION

INPUT	VALUE	RATIONALE
ARPU	\$4.50/mo	Blended subscriptions + transactions
Gross margin	90%	Software economics
Monthly churn	5%	Consumer social benchmark
Lifetime	12 months	1/churn with cap
LTV	\$54	ARPU × margin × lifetime

LTV/CAC BY CHANNEL

108x

COLLEGE RADIO

∞

VIRAL

19x

TIKTOK

17x

META

All channels above 3x threshold. College radio dominates.

PAYBACK PERIOD

CHANNEL	CAC	MONTHLY GP	PAYBACK
College radio	\$0.50	\$4.05	4 days
TikTok	\$2.80	\$4.05	21 days
Meta	\$3.20	\$4.05	24 days

Gross profit = ARPU × margin. All channels < 1 month payback.

CONVERSION FUNNEL

STAGE	RATE	BENCHMARK
Visit → Signup	25%	Above industry avg
Signup → First review	40%	Activation
First review → D7 active	30%	Retention
D7 active → Premium	5%	Monetization

Letterboxd converts 6-8%. Target 5% is conservative.

MARKET SIZE

\$6.2B

TAM

\$620M

SAM

\$62M

SOM

616M streaming subscribers × \$10/year potential spend

TAM BREAKDOWN

SEGMENT	USERS	SPEND POTENTIAL
Spotify	226M	\$2.3B
Apple Music	88M	\$880M
Amazon Music	82M	\$820M
YouTube Music	80M	\$800M
Others	140M	\$1.4B

10% engage deeply (SAM). 1% early adopters (SOM).

3 - YEAR PROJECTIONS

METRIC	2026	2027	2028
Users	100K	500K	2M
Premium %	4%	5%	6%
Premium users	4K	25K	120K
ARPU	\$4.50	\$4.50	\$4.50
ARR	\$180K	\$1.35M	\$6.5M

Conservative conversion rates. Improving with scale.

REVENUE MIX (2028)

STREAM	%	AMOUNT
Waxfeed+ subscriptions	60%	\$3.9M
Station plans	18%	\$1.17M
Wax Pax transactions	15%	\$975K
Other (boosts, etc.)	7 %	\$455K

Subscription-dominant. Predictable recurring revenue.

P&L PROJECTION (2028)

LINE ITEM	AMOUNT
Gross revenue	\$6.5M
Payment processing (3%)	-\$195K
Infrastructure	-\$120K
Gross profit	\$6.2M
Gross margin	95%

Software economics at scale.

OPERATING EXPENSES (2028)

CATEGORY	AMOUNT	% REVENUE
Salaries (8 FTE)	\$1.2M	18%
Marketing	\$800K	12%
Research	\$200K	3%
G&A	\$300K	5%
Total OpEx	\$2.5M	38%

PATH TO PROFITABILITY

YEAR	REVENUE	GROSS PROFIT	OPEX	EBITDA
2026	\$180K	\$162K	\$400K	-\$238K
2027	\$1.35M	\$1.2M	\$1.2M	\$0
2028	\$6.5M	\$6.2M	\$2.5M	\$3.7M

Break-even in 2027. Profitable in 2028.

ASSET VALUE: IP PORTFOLIO

Patent portfolio appreciates
independently

ASSET	STATUS	VALUE DRIVER
CCX Framework	Patent pending	Core methodology
TastelID Algorithm	Trade secret	User matching
BrainID Model	Research	Cognitive profiling
Data corpus	Growing	Research fuel

Defensive moat + acquisition currency.

RESEARCH OUTPUT VALUE

YEAR	PAPERS	PATENTS	VALUE
2026	2	0	Credibility
2027	4	1	Licensing potential
2028	6	2	Partnership leverage

Academic validation → enterprise credibility → revenue.

USE OF FUNDS

CATEGORY	AMOUNT	%
Engineering (2 hires)	\$425K	50%
Research (1 hire)	\$127K	15%
Marketing	\$170K	20%
Operations + reserve	\$128K	15%
Total	\$850K	100%

HIRING PLAN

ENGINEER #1

Full-stack / Mobile
\$100K-\$130K
Q1 2026

ENGINEER #2

Backend / ML
\$100K-\$130K
Q2 2026

RESEARCHER

Cognitive science
\$80K-\$100K
Q2 2026

Founder remains full-time through seed.

MILESTONES

MILESTONE	TIMELINE	BUDGET IMPACT
50 college stations	Q1 2026	\$0 (organic)
25K users	Q2 2026	\$40K marketing
First paper published	Q2 2026	Research hire
\$100K ARR	Q3 2026	Validation
100K users	Q4 2026	Paid scale begins

SERIES A POSITION

METRICS TARGET

100K+ users

\$850K+ ARR

6%+ conversion

Strong retention

NARRATIVE

Patent-protected moat

Research validation

Clear category leadership

Mobile apps launched

Target: Q4 2026 / Q1 2027

COMPARABLE VALUATIONS

COMPANY	STAGE	VALUATION	MULTIPLE
Letterboxd (2023)	Growth	~\$100M	15x ARR
Last.fm (2007)	Acquisition	\$280M	N/A
Goodreads (2013)	Acquisition	\$150M	N/A

Vertical social + IP = premium multiple.

RISK FACTORS

RISK	IMPACT	MITIGATION
Low activation	Revenue delay	Onboarding iteration
Retention drop	LTV compression	Social hooks, streaks
Patent challenge	IP value	23 claims breadth
Platform dependency	Data access	Multi-source integration

THE NUMBERS

90%+

GROSS MARGIN

17x+

LTV/CAC

\$6.5M

2028 ARR

Software economics. Consumer scale. Research upside.

POLARITY LAB

UNIT ECONOMICS THAT COMPOUND

PATENT PENDING | 23 CLAIMS