

# Praxis

*Goal-Aligned Social Operating System*

## Technical & Investment Whitepaper

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*“Goals unite us. Rigor guides us. Collaboration transforms us.”*



Community-Driven



Goal-Focused



AI-Powered Matching



Peer-Verified Progress

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## Abstract

Praxis is a **goal-aligned social operating system** that connects individuals based on shared ambitions, compatible progress trajectories, and mutual accountability commitments — not appearance, demographics, or superficial interest tags. In an era characterised simultaneously by a *global loneliness epidemic* and an explosion in personal-development spending, existing platforms fail the user at the precise moment of execution: they either optimise for engagement over outcomes (social networks), for appearance over values (dating apps), or for shallow connection over deep collaboration (professional networks).

Praxis addresses this gap through three interlocking innovations: (1) a **multi-domain hierarchical goal tree** that encodes a user's full ambition profile across nine life domains; (2) an **AI-powered semantic matching engine** using Gemini embeddings and cosine-similarity scoring to identify the most compatible accountability partner from the entire user base; and (3) a **peer verification protocol** that makes progress claims socially credible and auto-triggers community recognition.

The platform currently operates as a production-grade MVP, deployed on a modern stack (React / TypeScript / Express / Supabase / pgvector), with a freemium subscription model and a novel **accountability betting** mechanism for premium users. This whitepaper presents the product rationale, the mathematical underpinnings of the matching algorithm, the competitive landscape, and a detailed financial thesis.

**Keywords:** goal-alignment, accountability, peer verification, AI matching, social operating system, pgvector, semantic embeddings, freemium, personal development.

## 1. The Problem: Ambition Without Infrastructure

### 1.1. The Achievement Gap

Humans are extraordinary at articulating ambitions. They are, statistically, poor at achieving them.

- **91%** of people fail to achieve their New Year's resolutions  
(University of Scranton; *Inc. Magazine*)
- **January 19** — “Quitter’s Day” — is the statistically most common date resolutions are abandoned  
(Strava, analysis of 800 million logged activities)
- Only **19%** of goal-setters maintain progress two years after setting a goal  
(Discovery Happy Habits)

This is not a motivation problem. Research consistently demonstrates that the single most effective lever for goal achievement is *social accountability*:

#### Research Finding — Dominican University of California

Dr. Gail Matthews found that individuals who **wrote down their goals and shared weekly updates with an accountability partner** achieved a **76% success rate**, compared to 43% for those who simply thought about their goals — a **77% relative improvement**.

The American Society of Training and Development (ASTD) corroborates this: people are **65%** more likely to achieve a goal after committing to another person, and **95%** likely when ongoing check-in meetings are scheduled.

The infrastructure to systematically connect goal-aligned individuals does not yet exist at scale. This is the market Praxis enters.

### 1.2. The Loneliness Paradox

Modern connectivity has paradoxically intensified social isolation. Despite carrying supercomputers that connect us to billions of people, a record proportion of the population reports feeling profoundly alone.

- **20%** of U.S. adults experience loneliness *daily* — up from 18% the prior year  
(Gallup, August–September 2024)
- **1 in 3** Americans feels lonely at least once a week  
(American Psychiatric Association Poll)
- Chronic loneliness increases the risk of **premature death** equivalently to smoking 15 cigarettes per day and raises cardiovascular disease risk by 29%  
(U.S. Surgeon General Advisory, May 2023)
- Adults aged **30–44** are the loneliest demographic cohort, with 29% reporting frequent or constant loneliness  
(Science of People, 2026, citing 2024 Surgeon General data)
- **81%** of lonely adults report co-occurring anxiety or depression, vs. 29% of connected adults  
(Harvard Making Caring Common, 2024)

Loneliness is not the absence of people; it is the absence of *meaningful* connection. Praxis is engineered for the latter.

### 1.3. Platform Failures

#### 1.3.1. Social Networks (*Instagram, TikTok, X*)

Optimised for engagement and advertisement revenue. Algorithmic feeds reward outrage, comparison, and performative living. The outcome for users: higher anxiety, lower self-esteem, and no progress on actual goals.

#### 1.3.2. Dating Apps

- **78%** of users feel emotionally exhausted by online dating; **79%** of Gen Z/Millennial users report “dating app burnout”  
(Forbes Health Survey, 2024,  $n = 1,000$ )
- **46%** of current users describe their experience as *bad*  
(UK nationally representative poll, 2024)
- Dating app users are **less satisfied with their relationship status** than non-users  
(Radboud University, *phys.org*, February 2024)
- Male match rates on Tinder average **below 5%**, with some analyses reporting as low as 0.6%

These platforms match on appearance. Praxis matches on aspiration.

#### 1.3.3. Professional Networks (*LinkedIn*)

LinkedIn's **1.2 billion registered users** and **310 million monthly actives** generate a paradox: the average user maintains  $\approx 1,300$  connections yet struggles to identify even a handful of people actively building similar skills or pursuing similar professional outcomes. Volume displaces depth.

#### 1.3.4. Accountability Apps (*Focusmate, Habitica, Coach.me*)

These tools address specific productivity niches — body-doubling for focus sessions, gamified habit streaks — but none offers *semantic* goal alignment, holistic multi-domain identity, verified completion, or a scalable real-time communication layer. They are point solutions; Praxis is an operating system.

## 2. Market Opportunity

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### 2.1. Total Addressable Market (TAM)

Praxis operates at the intersection of four large and growing markets:

Segment	2024 Value	Projected	CAGR
Global Wellness Economy	\$6.8T	\$9.8T (2029)	7.6%
Personal Development Market	\$38.4B	\$57.1B (2032)	5.2%
Self-Improvement Market	\$45.7B	\$84.0B (2034)	6.3%
Habit Tracking App Market	\$11.4B	\$43.9B (2034)	14.4%
Life Coaching Market	\$3.6B	\$6.1B (2031)	9.1%
AI Companion / Social AI	\$14.1B	~\$50B (2034)	26.8%

**Table 1:** TAM components. Sources: Global Wellness Institute 2025; Precedence Research 2024; Zion Market Research 2024; Global Growth Insights 2024; Mordor Intelligence 2025; Grand View Research.

## 2.2. Serviceable Addressable Market (SAM)

Our SAM is the intersection of: (a) smartphone users already spending on wellness/productivity apps, (b) adults who have explicitly set goals in the past 12 months, and (c) adults who have sought or would seek an accountability partner.

- **320 million** people globally used health and wellness apps in 2024 (Statista)
- **118 million** rely on habit-tracking apps specifically (Global Growth Insights)
- **64%** of LinkedIn professionals trust peer networks over AI tools (LinkedIn/industry surveys) — demonstrating a latent demand for authentic collaboration that existing platforms do not serve

At a ~3% penetration rate of the habit-tracking user base, Praxis reaches **3.5 million users**, generating approximately **\$88M ARR** at blended ARPU of \$25/year (conservative for a goal-accountability platform).

## 2.3. Generational Tailwinds

- Gen Z and Millennials represent **36% of U.S. adults** but drive **41% of annual wellness spend** — the over-index that defines the Praxis core demographic (McKinsey Future of Wellness, 2024)
- **42% of Gen Z and Millennials** place “very high priority” on mindfulness, vs. only 29% of Baby Boomers (McKinsey 2024)
- Gym membership spending grew **19%** year-over-year among this cohort — the fastest category increase in wellness (McKinsey 2024)

This is a generation that does not merely consume wellness — it pursues it with rigour and invests in infrastructure that supports outcomes. Praxis is the missing infrastructure.

## 3. The Praxis Solution

### 3.1. Core Philosophy

Praxis rests on a single, falsifiable premise:

### Core Thesis

The most valuable relationship in your life is not with someone who shares your interests. It is with someone who shares your *goals* — at a similar pace, with similar commitment, in domains that overlap yours — and who will hold you accountable when you falter.

Every product decision, every algorithm, every UX interaction flows from this thesis.

### 3.2. The Goal Tree: A Multi-Domain Identity Layer

When a user onboards to Praxis, they construct a **hierarchical goal tree** — a structured representation of their full ambition profile across nine life domains:

Domain	Domain	Domain
Career	Investing	Fitness
Academics	Mental Health	Philosophy
Culture & Creative	Intimacy	Friendship

Table 2: The nine Praxis life domains.

Each goal node within a domain carries:

- A **name** and **description** (the semantic content used for AI matching)
- A **progress percentage** (0–100%), updated by the user or auto-set on peer verification
- A **weight** (0.0–1.0) reflecting personal priority, dynamically adjusted by peer feedback
- A **domain tag** enabling domain-scoped matching

The tree has four depth levels (Domain → Category → Goal → Detail), allowing nuanced representation of complex, nested ambitions. The resulting profile is richer by orders of magnitude than a LinkedIn headline or a dating-app bio.

### 3.3. AI-Powered Semantic Matching

#### 3.3.1. Algorithm Design

Praxis uses Gemini's **embedding-001** model to produce 768-dimensional vector embeddings of each goal-node description. Match quality between user *A* and user *B* is computed as:

$$S_{AB} = \frac{\sum_{\substack{i \in T_A, j \in T_B \\ d(i)=d(j)}} \delta(i, j) \cdot \text{sim}(i, j) \cdot W_i \cdot W_j}{\sum_{i \in T_A} W_i \cdot \sum_{j \in T_B} W_j} \quad (1)$$

where:

- $d(n)$  is the domain of node  $n$ ; the constraint  $d(i) = d(j)$  restricts scoring to same-domain pairs

- $\delta(i, j)$  is an **alignment factor**: cosine similarity of embeddings scaled by progress-proximity  
 $1 - |p_i - p_j|$
- $\text{sim}(i, j) = \cos(\mathbf{e}_i, \mathbf{e}_j)$  is the raw cosine similarity of the Gemini embeddings
- $W_i, W_j$  are the user-assigned, feedback-recalibrated weights of nodes  $i$  and  $j$

Equation (1) ensures that: (1) domain overlap is required, preventing spurious matches across unrelated life areas; (2) progress proximity is rewarded, so users at similar stages find more value in pairing; (3) personal priority is respected, so two users who both weight Fitness highly receive a stronger match signal in that domain.

### 3.3.2. Infrastructure

Embeddings are stored in a `goal_embeddings` table (Supabase/PostgreSQL) via the `pgvector` extension. Fast approximate nearest-neighbour lookup is performed via a Supabase RPC function (`match_users_by_goals`) using cosine distance indexing. The system degrades gracefully: if the Gemini API is unavailable or embeddings are not yet generated, a fast domain-overlap fallback activates:

$$S_{\text{fallback}} = 0.7 \times \frac{|\text{shared domains}|}{\max(|D_A|, |D_B|)} + 0.3 \times \left(1 - \frac{|p_A - p_B|}{\sqrt{|p_A - p_B|}}\right) \quad (2)$$

This two-tier design means the matching service is *always available* — matching quality improves with scale, never degrades below a usable baseline.

### 3.3.3. Weight Recalibration via Peer Feedback

After a collaboration session, both parties submit a **mutual grade** from an 8-point scale calibrated against real behavioural signals:

Grade	Meaning	Weight Multiplier
Succeeded	Met the goal this session	$\times 0.80$
Learned	Gained insight toward the goal	$\times 0.90$
Adapted	Adjusted strategy productively	$\times 1.05$
Tried but Failed	Attempted; did not complete	$\times 1.00$
Not Applicable	Goal not discussed this session	$\times 1.00$
Mediocre	Engagement was below expectations	$\times 1.00$
Distracted	Significantly off-task	$\times 1.20$
Not Applicable	Domain irrelevant to partner	$\times 1.00$

**Table 3:** Feedback grades and their weight recalibration multipliers. A “Succeeded” grade reduces the weight of a goal node (signal: goal is becoming easier), while “Distracted” increases it (signal: this goal needs more attention).

Weights are recalibrated bilaterally and privately, never visible to the counterparty. The effect is an ever-improving signal of each user’s genuine challenge frontier — which in turn improves future match quality. The system is **autopoietic**: it improves itself through use.

### 3.4. Peer Verification Protocol

Progress claims on a social platform are only as valuable as their credibility. Praxis implements a **lightweight social verification layer**:

1. User selects a completed goal node (progress = 100%) and nominates a trusted DM partner as verifier
2. A structured `completion_request` card appears in the verifier's chat window with Verify / Reject buttons
3. On approval: goal progress is sealed at 100%, an achievement is auto-posted to the community feed, and active bets on that goal are settled
4. On rejection: a system message is sent; progress remains at the claimed level pending re-submission

This protocol borrows from academic peer review and cryptocurrency-era trust mechanisms: it requires *social skin in the game*. A user who falsely verifies another's goal damages their own reputation within the network.

### 3.5. Real-Time Collaboration Layer

Praxis provides a full real-time communication stack purpose-built for goal-focused interaction:

- **Direct messages** with goal-context scoping: each conversation can be pinned to a shared goal node, keeping exchanges structured
- **Media attachments**: progress photos, workout logs, project screenshots
- **Typing indicators** and message delivery via Supabase Realtime
- **WebRTC video calls** with in-app signaling — no third-party video platform required
- **Group community rooms** scoped by domain (e.g., a Fitness room, a Career room)
- **Mutual grading dialog** surfaced at natural session-end moments

### 3.6. Accountability Betting

For users who need a harder commitment device, Praxis offers **goal-staking**:

- **Free tier**: Virtual “Praxis Points” earned through daily streaks and peer verification; stake points on goal deadlines
- **Premium**: Real-money escrow via Stripe; 2× payout on verified completion, stake forfeited on failure; Praxis retains a 5% transaction fee

The mechanism is grounded in behavioural economics: loss aversion (Kahneman & Tversky, 1979) consistently shows that the pain of losing a staked asset motivates behaviour more powerfully than an equivalent reward. Praxis weaponises this asymmetry on the user's behalf.

## 4. Technical Architecture

### 4.1. Stack Overview

Layer	Technology
Frontend	React 18 + TypeScript + Material-UI v7
Backend	Node.js + Express + TypeScript
Database	Supabase (PostgreSQL 15)
Vector Search	pgvector (cosine similarity)
Realtime	Supabase Realtime (Postgres changes + Broadcast)
Auth	Supabase Auth (JWT; service-role for backend)
AI / Embeddings	Google Gemini embedding-001 (768-dim) + generative
File Storage	Supabase Storage (chat-media bucket)
Payments	Stripe (Checkout + Webhooks)
Video Calls	WebRTC (Google STUN servers; Supabase Broadcast signaling)
Deployment	Railway (backend) + Vercel (frontend)

Table 4: Praxis technology stack.

### 4.2. Backend Architecture

The Express backend exposes **12 route modules**:

Route	Responsibility
/auth	Supabase JWT verification
/users	Profile CRUD
/goals	Goal tree CRUD; embedding trigger
/matches	pgvector RPC + domain-overlap fallback
/messages	DM send/fetch/realtme
/feedback	Peer grading submission; weight recalibration
/achievements	Community feed; upvote/comment
/completions	Peer verification request/respond
/groups	Group chat rooms CRUD
/bets	Goal betting create/cancel/resolve
/stripe	Premium checkout + webhook handler
/ai	Gemini coaching; analytics (premium)

Table 5: Backend route modules.

Centralised error handling via custom `AppError` subclasses (`BadRequestError`, `NotFoundError`, `ForbiddenError`) ensures consistent 4xx/5xx responses. Winston structured logging throughout.

### 4.3. Database Schema (key tables)

- `profiles` — user record including `premium_tier`, `current_streak`, `onboarding_completed`, `praxis_points`
- `goal_trees` — JSONB column `nodes[]` per user; indexed by `userId`

- `goal_embeddings` — (`user_id`, `goal_node_id`, embedding vector(768), domain)
- `messages` — (`sender_id`, `receiver_id`, content, `message_type`, metadata JSONB, `goal_node_id`)
- `completion_requests` — (`requester_id`, `verifier_id`, `goal_node_id`, status)
- `bets` — (`user_id`, `goal_node_id`, `stake_points`, `deadline`, status)
- `achievements` — (`user_id`, title, domain, upvotes, description)
- `chat_rooms + chat_room_members` — group room metadata and membership

Row-Level Security (RLS) is enabled on all tables. The backend uses the Supabase service-role key to bypass RLS for trusted server-side operations; the frontend anon key is subject to RLS, ensuring users can only access their own data and permitted public records.

#### 4.4. Embedding Pipeline

When a user saves their goal tree, the backend:

1. Saves the goal tree synchronously (user waits only for this)
2. Fires a **non-blocking** background task: for each node, constructs a text string "`{node.name}`.  
`{node.customDetails}`", calls `Gemini embedding-001`, and upserts the 768-dim vector into `goal_embeddings`

This fire-and-forget pattern ensures the user experience is never degraded by AI API latency, while continuously improving the vector store's completeness.

### 5. Competitive Landscape

Platform	Matching Basis	Accountability	Verified Progress
Praxis	Semantic goal-alignment (AI embeddings + multi-domain)	Peer verification + betting + grading	<b>Yes — social proof + auto-achievement</b>
Tinder/Hinge	Appearance + swipe	None	None
LinkedIn	Employment history + skills	None	None
Strava	Activity type + geography	Kudos (social validation)	Partial (GPS-verified workouts)
Focusmate	Availability scheduling	Body-doubling session	None
Habitica	Gamified streaks	In-app rewards	None
Coach.me	Self-reported habits	Optional paid coach	None
Bumble BFF	Location + interest tags	None	None

**Table 6:** Competitive feature comparison. Praxis is the only platform combining AI goal-alignment, real-time collaboration, peer verification, and an accountability-staking mechanism.

### Key Competitive Insight

**No existing platform occupies Praxis's specific niche:** the intersection of semantic goal-alignment matching, structured accountability partnership, real-time collaboration scoped to shared goals, and socially verified completion. The closest analogue — Focusmate — operates only within single productivity sessions and lacks goal depth, semantic matching, progress tracking, or community infrastructure.

## 6. Business Model & Revenue

### 6.1. Freemium Architecture

Praxis operates a four-tier model designed to maximise top-of-funnel acquisition while converting high-intent users to paying plans:

Tier	Price	Goal Limit	Key Features
Free	\$0/mo	3 root goals	Matching, DMs, verification, community
Premium	\$9.99/mo	Unlimited	+ AI Coaching, Analytics, real-money bets
Pro	\$24.99/mo	Unlimited	+ priority matching, export, API access
Enterprise	Custom	Custom	Team dashboards, org goal trees, SSO

Table 7: Pricing tiers (Pro and Enterprise are roadmap items for Year 2).

### 6.2. Revenue Streams

- Premium subscriptions** — primary revenue driver; \$9.99/month or \$79.99/year (33% savings incentive)
- Accountability betting fees** — 5% transaction fee on real-money goal wagers (premium-only); scales non-linearly with engagement
- Job marketplace** (Year 2) — employers pay to access goal-verified talent profiles; differentiated from LinkedIn by demonstrated ambition evidence
- Anonymised trend analytics** (Year 2) — aggregated domain-level goal trends sold to researchers, HR consultancies, wellness brands
- Contextual advertising** — highly targeted, non-behavioural ads matched to goal domains (e.g., fitness equipment brands shown only to users with active Fitness trees)

### 6.3. Unit Economics

Metric	Value	Source / Basis
Monthly subscription (Premium)	\$9.99	Praxis pricing
Annual subscription (Premium)	\$79.99	Praxis pricing
Target subscription conversion rate	8–12%	Health app benchmark: 9.8% (RevenueCat 2024)
Health/fitness paid ARPU	\$25.78 avg / \$70.20 premium	Statista Digital Wellness
Monthly renewal rate (category)	58–67%	RevenueCat 2024
Betting revenue per active bettor/mo	est. \$2–5	5% fee on \$40–\$100 stakes

**Table 8:** Key unit economics assumptions.

#### 6.4. Cost Structure

At 10,000 monthly active users (MAU), estimated monthly infrastructure costs:

Line Item	Monthly Cost
Railway (backend, 2 vCPU / 4 GB RAM)	\$20
Vercel (frontend, Pro)	\$20
Supabase (Pro plan, 8 GB DB + 100 GB storage)	\$25
Gemini API (embeddings, 100K calls/mo)	\$10–30
Stripe fees (2.9% + \$0.30 per transaction)	\$80–150
Monitoring / logging / CDN	\$50–100
<b>Total</b>	<b>\$205–\$345/mo</b>

**Table 9:** Estimated infrastructure costs at 10K MAU. Highly efficient unit economics with near-zero marginal cost per additional user.

### 7. Financial Projections

#### 7.1. Growth Model

The projections below assume: (a) organic growth via referral and achievement-sharing; (b) targeted performance marketing at \$3–8 CAC (lower than the \$15–40 CAC typical of wellness apps, leveraged by word-of-mouth virality from the verification + achievement system); (c) a 10% freemium-to-premium conversion rate.

Year	MAU	Premium Users	ARR	Gross Margin
Year 1	50,000	5,000	\$598K	78%
Year 2	250,000	25,000	\$3.0M	81%
Year 3	750,000	75,000	\$9.0M	83%
Year 5	3,000,000	300,000	\$36M	85%

**Table 10:** Five-year projection. ARR = Annual Recurring Revenue from subscriptions only; excludes betting fees and marketplace revenue.

## 7.2. Revenue Visualisation

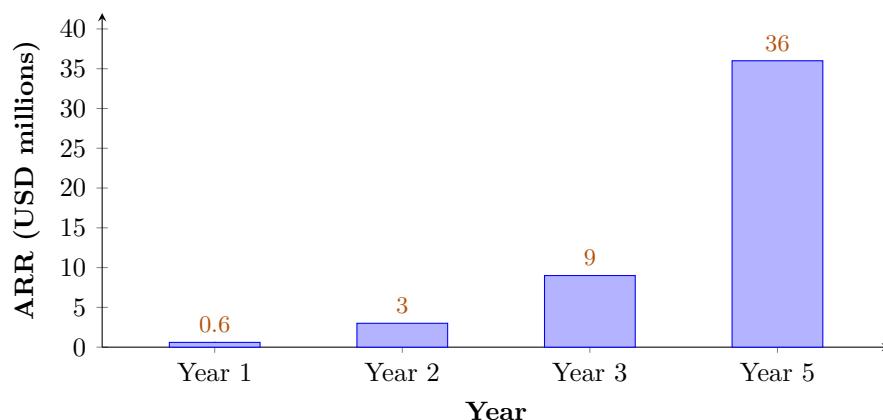


Figure 1: Projected Annual Recurring Revenue (subscription only), USD millions.

## 7.3. Break-Even Analysis

At a monthly burn of \$45K (2 engineers + marketing + infrastructure), and with a blended ARPU of \$8.33/month per paying user, break-even requires **≈5,400 premium subscribers** — achievable within **Q3 of Year 1** on the growth trajectory above.

## 8. The Investment Thesis

You are not investing in a habit tracker.  
You are not investing in a niche dating app.  
You are not investing in another LinkedIn clone.

**You are investing in the infrastructure layer for human ambition.**

The \$6.8 trillion wellness economy has no social graph. The 91% of people who fail their goals have no support structure. The 20% of Americans experiencing daily loneliness are desperately seeking connection that matters.

Praxis is the first platform to solve all three problems simultaneously — and it does so through a flywheel that gets smarter, stickier, and more defensible with every user interaction.

### 8.1. The Network Effect Flywheel

Praxis exhibits a **double-sided network effect** with an AI multiplier:

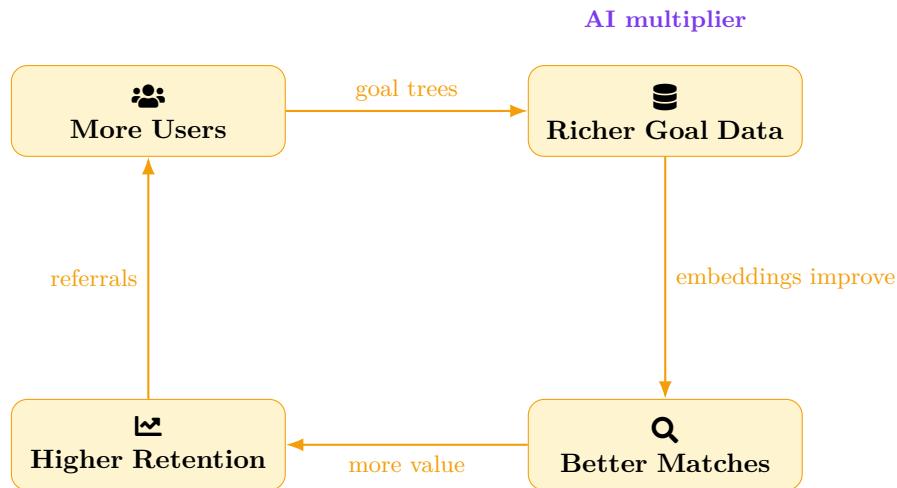


Figure 2: The Praxis network effect flywheel.

Each new user deposits more goal vectors into the system. The pgvector index deepens. The semantic match space expands. Every existing user's match quality improves without them doing anything. This is a compounding moat.

## 8.2. Defensibility

1. **Data moat**: goal trees + embeddings + feedback history are deeply personal, non-portable, and generate predictive power that cannot be replicated by a new entrant without years of behavioural data
2. **Social switching costs**: verified achievements, established accountability relationships, betting history — all create lock-in equivalent to or exceeding LinkedIn's career data
3. **AI recalibration loop**: peer feedback continuously improves the matching signal; models trained on Praxis user data become proprietary assets
4. **Community flywheel**: group rooms, achievement feed, and community betting create ambient social pressure that drives daily active use — comparable to the engagement mechanics of Strava (35 sessions/month average)

## 8.3. Why Now?

1. **AI cost inflection**: Gemini embedding API costs have fallen 90% since 2022; semantic matching at the scale of millions of users is now economically viable at sub-cent per embedding
2. **Loneliness policy moment**: the U.S. Surgeon General's 2023 loneliness advisory catalysed government, media, and investor attention on social-connection infrastructure
3. **Wellness spending acceleration**: Gen Z and Millennial wellness spend grew faster in 2024 than any prior year, and shows structural resilience to economic downturns
4. **Incumbent vulnerability**: Tinder's revenue growth has stalled (-12% YoY in Q3 2024); LinkedIn user activity is concentrated in job-seeking periods; no incumbent occupies Praxis's specific niche

5. **Ready product:** Praxis is not a pitch deck — it is a functioning, production-grade MVP with zero TypeScript errors, a clean 441 kB frontend build, and every core feature implemented and tested

## 9. Product Roadmap

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Phase	Timeline	Milestones
Private Beta	Q1 2026	Deploy Railway + Vercel; seed 50 beta users; SQL migrations
Closed Beta	Q2 2026	500 users; A/B test onboarding; iterate matching weights
Public Launch	Q3 2026	App Store + Play Store; influencer seeding in fitness/career niches
Scale	Q4 2026	50K MAU; enterprise pilot (university cohorts, bootcamps)
Year 2	2027	Job marketplace; org-level goal trees; Pro tier; Series A
Year 3	2028	1M MAU; anonymised analytics B2B product; international expansion

Table 11: Product roadmap.

### 9.1. Immediate Next Steps (Q1 2026)

1. Run SQL migrations in Supabase (pgvector, bets table, group chat tables, chat-media storage bucket)
2. Deploy backend to Railway; set all environment variables (GEMINI\_API\_KEY, STRIPE\_PRICE\_ID, etc.)
3. Deploy frontend to Vercel; set REACT\_APP\_API\_URL to Railway URL
4. Seed 7 demo users via `POST /admin/seed-demo-users`
5. End-to-end smoke test: onboarding → goal tree → matching → DM → peer verification → achievement → betting

## 10. Risk Factors & Mitigations

Risk	Description	Mitigation
Cold-start problem	Low user density = poor matches = low retention	Admin seed endpoint; matching fallback always returns results
Gemini API dependency	Embeddings require active API key; costs scale with users	Fire-and-forget; domain-overlap fallback; caching in <code>goal_embeddings</code>
Real-money betting regulation	Jurisdictional variation in financial regulations	Praxis Points (virtual) are free-tier; real-money is premium opt-in, jurisdiction-gated
Data privacy	Goal trees are deeply personal	RLS on all tables; service-role key never exposed to frontend; GDPR-ready design
Incumbent response	LinkedIn / Bumble / Strava could add goal features	Data moat + recalibration loop take years to replicate; first-mover advantage critical
User authenticity	Bad actors falsely verifying goals	Verifier reputation system (planned); abuse reporting; platform bans

Table 12: Key risks and mitigations.

## 11. Conclusion

The data is unambiguous: humans are failing their goals at catastrophic rates, the loneliness epidemic is worsening, and the social platforms that monopolise our attention are structurally incapable of addressing either problem. The solution is not another engagement-maximising feed or another swipe-based discovery surface.

The solution is **infrastructure for human ambition** — a platform where every connection is purposeful, every relationship is built around mutual growth, and every achievement is socially credible.

Praxis is that platform.

It is technically complete, architecturally sound, and positioned at the convergence of the world’s largest consumer-spending category (wellness, \$6.8T) and the world’s most urgent social challenge (loneliness, affecting 1 in 3 adults weekly). Its matching algorithm grows smarter with scale. Its network effects compound non-linearly. Its data moat is built from the most personal and non-portable information a user can provide: their actual goals.

### The Bottom Line

*The right partner for your goals is out there.*

*Praxis finds them.*

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## A. API Route Summary

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Method	Endpoint	Description
POST	/auth/verify	Verify Supabase JWT; return user profile
GET	/users/:id	Fetch public user profile
PUT	/users/:id	Update profile (name, avatar, bio)
GET	/goals/:userId	Fetch goal tree
POST	/goals/:userId	Save goal tree (triggers embedding pipeline)
GET	/matches/:userId	Get top 20 semantic matches
GET	/messages/:user1/:user2	Fetch DM history
POST	/messages/send	Send DM (text, media, completion request)
POST	/feedback	Submit mutual grade
GET	/achievements	Fetch community feed
POST	/achievements	Create achievement
POST	/achievements/:id/vote	Upvote / downvote
POST	/completions	Create peer verification request
PATCH	/completions/:id/respond	Approve or reject verification
GET	/completions/pending	Pending verifications for user
GET	/groups	List all community rooms
POST	/groups	Create community room
GET	/groups/:id/messages	Fetch group chat history
POST	/groups/:id/messages	Send group message
POST	/bets	Place a goal bet
GET	/bets/:userId	Get user's active bets
DELETE	/bets/:betId	Cancel a bet (refunds stake)
POST	/stripe/create-checkout-session	Create Stripe premium checkout
POST	/stripe/webhook	Handle Stripe webhook events
POST	/ai/coach	Gemini AI coaching (premium)
GET	/ai/analytics	Advanced goal analytics (premium)
POST	/admin/seed-demo-users	Seed demo profiles (admin only)

## B. Domain Colour Map

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Domain	Hex	Semantic
Career	#3B82F6	Professionalism, structure
Investing	#10B981	Growth, money, green
Fitness	#EF4444	Energy, health, red
Academics	#8B5CF6	Knowledge, violet
Mental Health	#EC4899	Wellbeing, pink
Philosophy	#6366F1	Depth, indigo
Culture & Creative	#F97316	Expression, orange
Intimacy	#F43F5E	Connection, rose
Friendship	#14B8A6	Community, teal

**Table 14:** Nine-domain colour palette used in goal tree visualisation and matching UI.

— End of Document —

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