

The WellWave Endure Band

An **endurance athlete's** go-to fitness watch, providing a **training community** and **actionable insights** based on AI analyses of real-time biometric data.

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1. Product Overview

We seek to empower high-performance and aspiring endurance athletes with the technology to realize their potential. We are the first product on the market that is specifically built for endurance athletes, including ironmanners, triathletes, marathon runners, and more.

Professional and aspiring endurance athletes lack and actively seek:

1. A cohesive training community with whom they can share the uniquely challenging journey of endurance sports, through both mutual support and friendly competition;
2. A constantly evolving, dynamic training plan tailored to their personal baseline and goals;
3. A single source of relevant biometric data that's actually unique and relevant to endurance sports.

The Endure Band is our solution to all three pain points.

The rise of run clubs across the world is a testament to athletes' desire for a community specific to the endurance experience, as well as the power of social bonds through their sport.

Thus, we envision that the Endure Band will not only have streamlined and powerful *function*, but also beautifully-designed *form*. Our product will build a strong global community by serving as a hard-earned social signal – an easily recognizable “badge” showing that you are part of a group, enabling camaraderie amongst Endure Band athletes.

2. Scope and Objectives

Scope:

The Endure Band is built specifically for endurance athletes — not general fitness consumers. It unifies three pillars that athletes seek but rarely find in a single product:

1. a training-oriented community,
2. a dynamic, personalized training plan, and
3. endurance-specific biometric insights.

Our platform integrates continuous biometric sensing, AI-driven performance analysis, and socially reinforcing features that cultivate belonging and accountability. The focus is on meaningful performance improvement, personal transformation through disciplined training, and the social identity that endurance athletes proudly carry.

The product will **not** expand into unrelated smartwatch utilities, generic wellness content, or marketplace-style add-ons that dilute purpose. Everything we build will serve the core endurance mission.

We serve a wide market: there are ~2 million marathon runners each year, and ostensibly many times that number who are training to become marathon runners. The fitness wearable market was sized at **\$90B** in 2022 and is projected to grow to **\$250B** by 2030.

Core Objectives (OKRs)

Objective 1: Foster an earned, high-trust endurance community.

Support social features that strengthen camaraderie, shared identity, and positive pressure — from training groups to local competitions, leaderboards, and simple recognition signals that show “I belong here.”

Objective 2: Deliver training plans that feel as tailored and adaptive as a personal coach.

The platform continuously refines workouts, rest cycles, and training blocks based on biometric signals, goals, and performance trends — evolving as the athlete improves instead of remaining static.

Objective 3: Provide endurance-specific biometric insights that actually translate to better race outcomes.

The Band tracks the vitals and activity data that matter most to endurance sports, and the AI layer turns that data into clear, actionable recommendations rather than raw stats.

Intentional Exclusions:

- Messaging/calling and lifestyle smartwatch features
- Generic step-goal gamification
- Non-athlete audience targeting
- One-size-fits-all training templates

3. User Personas

Persona 1: Jehan – the dedicated competitor

- **Profile:** 28, former D1 athlete, works at a tech startup. Serious marathoner who trains rigorously, often travels for races, and occasionally podiums.
- **Needs:**
 - A fully tailored multi-week, evolving training plan that responds to his personal baseline and health metrics, ongoing biometric data, and performance gains
 - Race-driven recommendations that tighten pacing, conditioning, recovery, and tapering
 - Results without paying thousands for private coaching
- **Mindset:** Tech-forward, disciplined, intrinsically motivated by performance, and wants a community of athletes operating at his level.
- **Pain Points:**
 - Static or generic plans that don’t adapt
 - Lack of peers who train as intensely
 - Scattered data sources that don’t give actionable, endurance-specific insight

- **Why Endure Band:**
He gets personalized coaching at scale, meaningful benchmarks, and a community that signals seriousness and commitment.

Persona 2: Angeline – the aspiring and highly social endurance athlete

- **Profile:** 22, recent college graduate now in finance. Loves staying active, recently joined a city run club, inspired by endurance culture, and signed up for her first short triathlon with friends primarily for social reasons
- **Needs:**
 - Structured training guidance that makes her feel confident, safe, and prepared
 - Metrics that show progress over time
 - A social ecosystem that deepens motivation, friendships, and shared goals
- **Mindset:** Sees endurance sports as both aspirational and communal— more “becoming part of something” than elite competition (at least for now).
- **Pain Points:**
 - Doesn’t want to pay for formal coaching
 - Finds existing apps too generic and not clearly tied to building toward a race
 - Wants accountability and camaraderie
- **Why Endure Band:**
She gets community, beginner-friendly coaching that adapts to her physiology, and a way to visualize growth as she trains toward her first race— while looking and feeling like a real endurance athlete.

4. User Stories:

- Onboarding and Goal Definition:
 - As a new user, I want to quickly create an account so I can start receiving personalized training insights.
 - As a new user, I want to set my primary goal (Ironman, for example) so the training plan is aligned with what I want to achieve.
 - As a new user, I want to input my current fitness level and schedule availability so the AI coach can design a realistic weekly plan.
- Daily AI Training Insights:
 - As an athlete, I want to see a clear AI-generated daily workout recommendation so I know exactly what training to do that day.
 - As an athlete, I want to understand why a certain workout was prescribed so I can trust the training logic.
- Workout Execution and Tracking:
 - As a user, I want the Endure Band to automatically track my run (distance, HR, pace, GPS) so I don’t have to manually log my workouts.
 - As a user, I want my completed workouts and the data from them to automatically sync to the app so I can review my performance afterwards.
 - As a user, I want to view a detailed post-workout breakdown so I can understand my effort, heart rate zones, and training load.
- Weekly Structure:
 - As a user, I want to see a simple weekly training calendar so I can visually see and understand my long term plan.
 - As a user, I want my plan to adapt dynamically when I miss a workout so the training load remains balanced and I can stay on track.
- Progress Tracking:

- As a user, I want to see a weekly dashboard showing weekly mileage, training load, and milestone progress so I can see if I'm moving towards my goal.
- As a user, I want to see my consistency week-over-week so I can stay motivated.

Customer Walkthrough:

Angeline, a 22-year-old new endurance athlete, downloads the WellWave app and begins onboarding. She enters her goal ("train for first triathlon"), weekly availability, and recent fitness history. When she finishes onboarding, the app instantly generates her first week of training, showing five structured workouts and two rest days. The next morning, Angeline opens the app and sees her AI-recommended workout: "Easy Aerobic Run – 30 minutes." She taps into the "Why this workout?" section to understand how aerobic base building fits into her overall progression. She completes the run wearing the Endure Band, which automatically records distance, pace, and heart rate. When she finishes, her workout syncs immediately to the app. Her dashboard updates, showing today's completed session, weekly mileage progress, and her long-term goal countdown. By the end of the week, Angeline has completed four of five planned workouts. Because she missed Wednesday's session due to work, her training plan automatically adjusts the following week's load. She feels confident, supported, and motivated to continue.

5. Functional Requirements

Priority 1

Core Features (MVP - must have)

1. AI Training Coach & Daily Recommendations

Purpose: Provide athletes with clear training recommendations each day, eliminating decision fatigue and data overload.

Functionality:

- Display personalized daily workout recommendation on home dashboard (e.g., "Tempo Run - Thursday: 1 mile easy warm-up, 3 miles at comfortably hard pace...")
- Show "This Week's Analysis" with progress toward weekly mileage goals (e.g., "46.0 miles completed, 184% of your 25-mile target")
- Provide AI recommendations based on training load, HRV, sleep data, and weekly goals
- Include expandable "Why this workout?" explanations showing data inputs (HRV, training load, recovery status)
- Display "Next Workout" preview to help athletes plan ahead.

Priority: P0 (Launch Blocker)

Dependencies: Backend AI recommendation engine/API, user profile with goals and enough data to suggest data-backed recommendations, hardware sensor data sync.

Acceptance Criteria: Users can view today's recommendation within 3 seconds of opening the app, and 90% of recommendations align with what certified coaches would prescribe for similar athletes.

2. User Authentication & Onboarding

Purpose: Securely create user accounts and collect baseline fitness data for personalized training

Functionality:

- Simple username-based login

- New user onboarding flow collecting: primary goal (e.g., "Train for full marathon distance"), current fitness level, training availability, preferred training days
- Profile setup with basic metrics (age, weight, resting heart rate baseline)

Priority: P0 (Launch Blocker)

Dependencies: Supabase authentication, user profile database

Acceptance Criteria: Users can create an account and complete onboarding in under 3 minutes to reduce friction and churn rate during the onboarding process.

3. Workout Tracking & Logging

Purpose: Automatically capture workout data from WellWave Endure band and display detailed post-workout analytics in the app.

Functionality:

- Real-time workout recording via hardware band (GPS, heart rate, duration)
- Post-workout summary displaying: distance, duration, pace, calories, heart rate analysis (average, max, training zones), training load score
- Workout history in "Recent Activities" feed showing last 10+ workouts with key metrics
- Workout completion marks off scheduled training plan items

Priority: P0 (Launch Blocker)

Dependencies: Hardware Bluetooth sync, GPS data processing, heart rate zone calculations

Acceptance Criteria: Workout data syncs within 10 seconds of completion; 95% data accuracy compared to benchmark devices such as Garmin.

4. Training Progress Dashboard

Purpose: Give athletes at-a-glance view of their weekly/monthly progress toward goals

Functionality:

- Display current week metrics: total miles, training load, number of workouts completed
- Weekly Distance Progress bar showing percentage toward goal (e.g., "184% - 46.0 mi completed, 25 mi goal")
- Display "Primary Goal" and time remaining (e.g., "Train for full marathon distance - 8 weeks remaining")
- Show current week completion status (e.g., "3 of 5 workouts completed")

Priority: P0 (Launch Blocker)

Dependencies: Workout data aggregation, user goal settings

Acceptance Criteria: Dashboard loads in under 2 seconds; metrics update in real-time after workout completion

5. Weekly Training Plan

Purpose: Provide structured, periodized training schedule that adapts to user performance and recovery

Functionality:

- Display a 7-day training calendar with scheduled workouts i.e. Recovery Day Monday, Easy Aerobic Run Tuesday, Strength & Mobility Wednesday, etc.
- Each workout shows: type, distance/duration, detailed instructions, expected training load
- Plan auto-adjusts based on: missed workouts, illness/injury flags, overtraining indicators, user-reported fatigue

- Visual indicators for workout completion status

Priority: P0 (Launch Blocker)

Dependencies: AI training plan generator/API, user goal input, adaptive algorithm

Acceptance Criteria: Plan successfully adapts when user skips 2+ consecutive workouts; 80% of users report plan feels "personalized to them"

Priority 2

Enhanced Features (Post Launch - good to have)

1. Social Feed & Community

Purpose: Build accountability and motivation through peer connections and milestone sharing

Functionality:

- Activity feed showing friends' completed workouts with stats (distance, duration, pace, avg HR)
- Like/comment on friends' activities
- Post personal workout summaries with optional text caption
- Share workout directly to feed from workout summary screen
- "Friends" tab to manage training connections

Priority: P1 (Post-Launch Month 7-12)

Dependencies: Social graph database, activity feed algorithm, notification system

Acceptance Criteria: 40% of users post at least one activity per week; users with 3+ friends have 2x retention vs. solo users

2. Training Groups & Challenges

Purpose: Create community around shared goals (marathon training, Ironman prep) and drive engagement through competition

Functionality:

- Join/create training groups by goal, location, or event (e.g., "NYC Marathon 2026")
- Group leaderboards showing weekly mileage, training load, consistency
- Time-bound challenges (e.g., "#Endure100 - Run 100 miles in November")
- Group chat/discussion threads for training tips

Priority: P1 (Post-Launch Month 7-12)

Dependencies: Group management system, leaderboard calculations, push notifications

Acceptance Criteria: 40% of users join at least one group within first month; groups with 10+ members show 25% higher retention

Priority 3

Future Enhancements (nice to have)

1. Race Day Mode

Purpose: Provide real-time pacing guidance and fueling reminders during race events

Functionality:

- Activate "Race Mode" for marathon/triathlon events

- Real-time pace comparison to goal pace with visual alerts
- Fueling/hydration reminders at optimal intervals (e.g., "Take gel at mile 6, 13, 20")
- Split time predictions and finish time estimates

Priority: P2 (Month 13-18)

Dependencies: Real-time GPS tracking, race strategy algorithm

Acceptance Criteria: 60% of users activate Race Mode for their goal event; 70% report pacing guidance was helpful

2. Coach Portal

Purpose: This would be a B2B feature. It would allow professional coaches to monitor and adjust training plans for multiple athletes.

Functionality:

- Coach dashboard showing all athlete metrics, adherence rates, injury flags
- Ability to override AI recommendations with manual workout assignments
- Bulk messaging to athletes
- Payment/subscription management for coached athletes

Priority: P3 (Month 18+)

Dependencies: Multi-user permissions system, coach account types, billing integration

Acceptance Criteria: 50+ coaches sign up within first 6 months; coaches manage average of 15 athletes each

6. **Non-Functional Requirements**

a) **Performance**

Dashboard loads < 2 seconds on 4G LTE and < 1 second on WiFi. The band must sync workout data to the app within 10 seconds of workout completion. All training load metrics, progress bars, and performance indicators should update in real time without requiring a page refresh, and the app must also support offline workout tracking with automatic data syncing once a connection is restored, which is especially important for athletes training in remote areas. These requirements address past WellWave user complaints about 3–5 minute sync delays, emphasizing that immediate data availability is essential for athletes who rely on timely insights to make same-day training decisions.

b) **Scalability**

50k concurrent users without performance degradation, with a target of 10k users by Month 12 and capacity for 5× growth. The social feed must load smoothly even with users having 500+ connections and viewing 100+ daily posts. This level of scalability is essential because the referral-driven growth model could cause sudden user spikes, and the platform must be prepared to handle rapid expansion without crashes.

c) **Security & Privacy**

All user health data, including HRV, heart rate, and GPS information, must be encrypted both at rest and in transit. The system must comply with GDPR and CCPA, offering full data export and honoring account deletion requests within 30 days, while payments are processed using PCI DSS-compliant services such as Stripe. These measures are critical because health data is highly sensitive, regulatory fines can reach €20 million, and many athletes, especially those in military or government roles, require strict privacy protections.

d) **Reliability & Availability**

The platform must meet a 99.5% uptime requirement, and ensure zero workout data loss with

99.99% reliability. A disaster recovery plan should guarantee a 4-hour Recovery Time Objective. Hardware must successfully sync at least 95% of workouts on the first attempt, with automatic retries on failure. This level of reliability is essential because losing key workout or race-day data severely damages user trust, and athletes will not pay for a service that fails when they need it most.

e) Usability & Accessibility

The product must be designed mobile-first for both iOS and Android, with all workout metrics easily readable outdoors through high contrast modes. Core tasks i.e. starting a workout, checking recommendations, and marking workouts complete should be accessible with one hand, even while running. Users must receive clear visual feedback and the interface must meet WCAG 2.1 AA accessibility requirements. These considerations matter because athletes typically interact with the app while tired, sweaty, or outdoors, so the UI must be glanceable, forgiving, and highly accessible.

f) Device Compatibility

The app must support iOS 11+ and Android 11+ to cover over 95% of the target market, while the hardware band should use Bluetooth 5.0, offer at least 18 hours of battery life, and meet IPX7 water-resistance standards. Sensors must achieve ± 5 bpm heart-rate accuracy and ± 10 meter GPS accuracy, and user data should sync seamlessly across multiple devices such as phones, tablets, and web. These requirements ensure that endurance athletes who train in harsh outdoor conditions can rely on durable hardware and consistent software performance across all their devices.

g) Localization & Internalization

The initial launch will focus on English only for the US market, with Phase 2 expanding into European languages i.e. German, French, and Spanish, and adding metric/imperial unit toggles. The platform should support USD at launch and later add EUR and GBP. This matters because the combined US and European markets represent a large serviceable market, and meaningful international expansion requires full localization, not just basic translation.

7. Prototypes

Given the two primary components to our product, we made prototypes across the app and website that shows the AI insights and one that is a mockup of the actual band itself and how it works.

The prototype:

We built a website to simulate the experience that a user would have when they signed into our product to view the core insights and data that Well Wave performs. This prototype is a comprehensive AI-powered fitness training platform that helps athletes track, analyze, and optimize their endurance training. The platform features workout history with visual insights including pace analysis and split breakdowns, social features where athletes can share achievements and interact with the community, and real-time performance tracking that helps users understand not just what they did, but why each workout matters for their overall fitness goals like marathon preparation or general endurance improvement.

12345

What's your primary goal?

Choose the goal that matters most to you

🔗 Train for Ironman

🎯 Train for Full Marathon

📈 Improve General Fitness

📉 Weight Loss & Health

📉 Other

123456

Your Current Performance

Help us understand your current fitness level across disciplines

📄 Import Your Data

Connect your data sources for more accurate recommendations

🔗 Connect Strava

📱 Apple Health

How many years of experience do you have?

Years

🏃 Running Performance

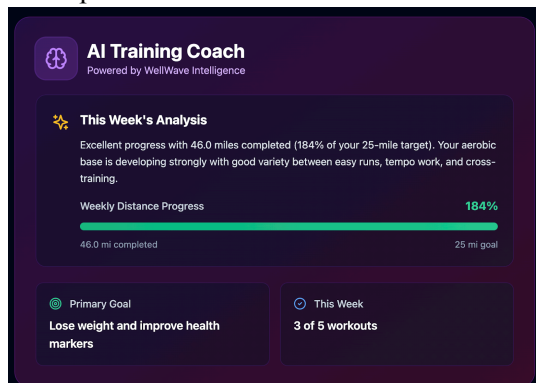
Current Average Pace (min/mile)

e.g., 8.5

Longest Run (miles)

e.g., 13.1

These first two screenshots show the onboarding flow, where athletes set up their baseline profile and training context. New users input their primary goal (e.g., first marathon vs. Ironman), current fitness level, typical weekly mileage, and preferred training days so the system can understand both their capacity and constraints. We also collect key attributes like age, training history, and prior race experience to anchor the initial training plan to the athlete’s real starting point rather than a generic “one-size-fits-all” template. This rich onboarding data is critical for training and conditioning the AI model so that all subsequent recommendations, load adjustments, and alerts are grounded in the athlete’s true background and capabilities.



🧠 AI Training Coach

Personalized insights powered by WellWave AI

🎯 Goal Context

Morning shakeout run serving as active recovery. Reinforces aerobic adaptations from yesterday's hard session.

📈 Performance Analysis

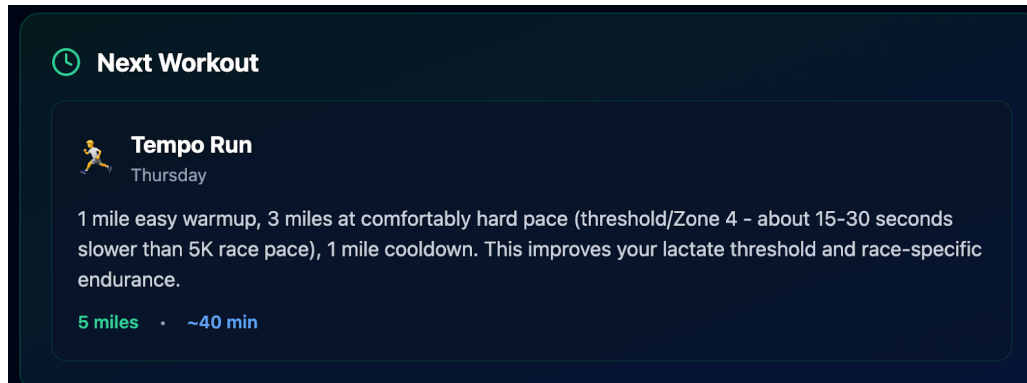
Consistent 6:50-7:00 min/mi pace with stable heart rate (145 avg) shows good aerobic efficiency. Negative splits indicate strong endurance.

🌟 AI Recommendation

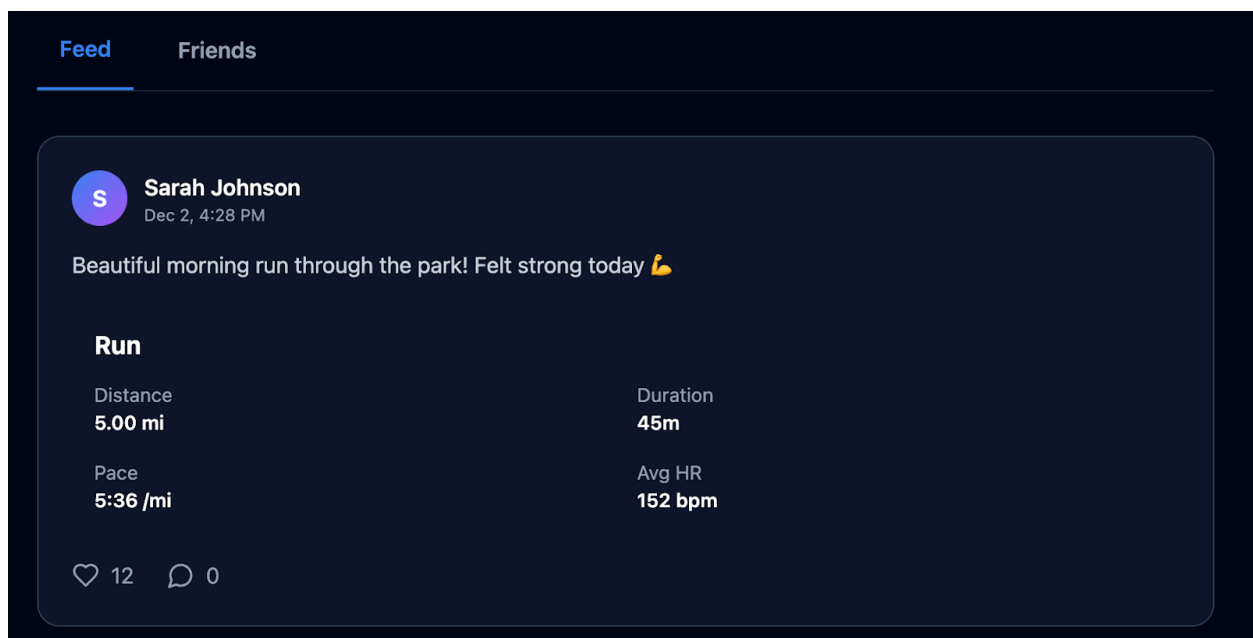
Excellent pacing control. Your Zone 2 fitness is improving - ready to push tempo work by 5-10 seconds per mi next session.

📅 Recovery Guidance

Moderate training load (155). Take an easy day or cross-train tomorrow to maximize adaptation.



These screens demonstrate the AI Training Coach experience, where athletes see a clear, digestible summary of how their training is progressing. The dashboard surfaces “This Week’s Analysis,” weekly distance progress against goal, and primary training objective alongside personalized written insights that contextualize recent workouts (e.g., goal context, performance analysis, recovery guidance). Below that, athletes can expand detailed AI-generated breakdowns explaining why a given workout was prescribed, how their heart rate and pacing trends are evolving, and what adjustments the system recommends next. Together, these views turn raw biometric and workout data into actionable, endurance-specific coaching that reduces guesswork and decision fatigue for the athlete.



The social screens prototype the community layer of WellWave, where athletes can share completed workouts, react to friends’ efforts, and stay accountable to long-term goals. Each post highlights key workout metrics (distance, pace, duration, average heart rate) alongside lightweight social actions like likes and comments, making it easy to celebrate progress and maintain motivation between races. The “Feed” and “Friends” tabs are designed to mirror the organic feel of local run clubs and training groups: users don’t just see numbers, they see other real people grinding through similar sessions. This social fabric is a core part of our go-to-market strategy, reinforcing retention and positioning the Endure Band as a visible badge of belonging to a committed endurance community.



The Endure Band is designed first and foremost as a visible, social signal that you're part of the WellWave training ecosystem. Its clean, continuous form factor and subtle light accents make it instantly recognizable in gyms, group runs, and races, functioning almost like a membership badge for committed endurance athletes.

At the same time, the hardware is intentionally minimal and screenless. During workouts, the band is meant to disappear on the wrist: it's lightweight, low-profile, and smooth around the edges so it won't catch on clothing or interfere with form during running, lifting, or cross-training. All of the "thinking" happens in the app—analysis, insights, and coaching—so the band can focus purely on accurate sensing and all-day comfort, while the phone becomes the primary surface for reflection and decision-making before and after the workout.

8. Constraints and Assumptions

Technical Constraints

The accuracy of heart-rate and GPS sensors directly affects the quality of training insights; poor readings would undermine trust in the product. Bluetooth syncing varies across mobile devices, and differences between iOS and Android background permissions may limit automated data transfer or require platform-specific workarounds. AI-generated recommendations must load quickly and safely, which constrains how complex the underlying training-plan logic can be. Manufacturing a durable, water-resistant band also introduces constraints related to battery life, material cost, and supply-chain reliability.

Key Assumptions

We assume endurance athletes will wear the band consistently enough for the system to learn accurate baselines and deliver meaningful recommendations. We also assume that users are comfortable providing personal fitness information during onboarding and that they value adaptive, personalized plans more than static templates—an assumption supported by early testing and interviews. Another assumption is that athletes will trust AI-based explanations if they are transparent and clearly tied to their goals.

Ethical Considerations

Because the system influences athletes' training decisions, AI recommendations must avoid promoting unsafe intensities, overtraining, or implying medical guidance. Transparency ("Why this workout?") is essential to help users understand and evaluate the advice they receive. The product also handles sensitive biometric and location data, which creates ethical obligations around data minimization, encryption, and

clearly communicating how information is used. Finally, the AI model must avoid bias toward elite athletes; otherwise, beginners or lower-fitness users could receive inappropriate training loads.

9. Milestones and Timeline

Q4's used to get done things that took longer than expected (not planning on achieving milestones in Q4 per advice given to us after our initial pitch):

Q1 2026 — Planning & Design

- Finalize product requirements and technical architecture
- Finalize design concepts for the band
- Begin early supplier conversations

Milestone: Requirements and initial design approved

Q2 2026 — Prototype Development

- Build early hardware prototypes (sensors, HR, GPS, battery)
- Develop core app features (onboarding, AI recommendations, workout logging)
- Integrate Bluetooth syncing and data pipelines

Milestone: Working hardware + software prototype

Q3 2026 — Refinement for Beta

- Improve hardware comfort, durability, and battery life
- Refine AI coaching logic and explanations
- Prepare beta test materials and finalize app UI

Milestone: Beta-ready hardware and app

Q1 2027 — Beta Testing & Iteration

- Conduct controlled athlete beta (100–150 users)
- Collect feedback on sensor accuracy, plan relevance, and usability
- Fix defects and improve sync speed and training logic

Milestone: Beta insights incorporated

Q2 2027 — Manufacturing Prep

- Finalize manufacturer and tooling
- Conduct regulatory checks
- Begin first production run

Milestone: Go/no-go decision for full manufacturing

Q3 2027 — Public Launch

- Launch direct-to-consumer with creator partners
- Monitor early reliability, engagement, and safety metrics

Milestone: Official WellWave Endure Band launch

10. Resource Requirements

1. Human resources

- a. PM: Overall strategy, roadmap, user interviews, etc. (primary contact)
- b. Lead backend engineer: Build core LLM
- c. Frontend engineer: Develop mobile app (Beta) and implement user interface
- d. Data scientist: Fine-tuning LLM, validating model

2. Technical infrastructure & key technologies

- a. Cloud platform: Google Cloud Platform or AWS
 - i. Scalability, security, access to ML services
- b. Database: Firestore or PostgreSQL or similar
 - i. Secure, compliant storage that can be used for user profiles, training history, etc.
- c. Core AI: Gemini API

- d. Frontend framework: React or Next.js
 - i. Single-page application framework for rapid iteration on mobile
 - e. Security: HIPAA-compliant storage solutions
 - i. Mandatory for handling sensitive personal health and biometric data
- 3. Tools and workflow
 - a. Product management: Jira or Asana
 - i. Sprint planning, bug tracking, roadmap planning, etc.
 - b. Design & prototyping: Figma (for UI/UX design)
 - c. Analytics: Amplitude or Mixpanel (for tracking key engagement metrics)
 - d. A/B testing: Google Optimize or custom (for validating formats and UI flows)

11. Testing and Quality Assurance

Testing Procedures:

- a) **Unit Testing & Integration Testing | Frequency: Continuous**
 Unit testing will cover all core functions, including workout calculations, training-load algorithms, and readiness-scoring logic, with a target of achieving at least 80% code coverage. Tests will be written using Jest for the React front end and Pytest for the backend, and they will run automatically on every code commit to ensure that new changes do not break existing functionality. Integration testing will focus on end-to-end interactions across the system, including hardware-to-app synchronization, API endpoints, and all database operations.
- b) **Hardware Testing | Frequency: Monthly**
 Monthly hardware testing will evaluate band durability, sensor accuracy, battery performance, and water resistance. Core tests include heart-rate accuracy compared to a medical-grade chest strap, GPS accuracy against known course distances and water resistance.
- c) **Beta Testing | Frequency: Months 4-6 Pre-Launch**
 Beta testing will span eight weeks and include 100 users: 50 Ironman trainees, 30 marathoners, and 20 ultra-runners. Key metrics will include daily active use (targeting 60%+), workout completion (50%+), sync failure rate (<5%), and an NPS score above 30.
- d) **Load & Performance Testing | Frequency: Pre-Launch**
 Load testing will stress the system under up to 10× the expected user load to ensure stability at scale. Core tests include simulating 5,000 concurrent users syncing workouts at the same time, validating that a social feed with over 1 million posts loads in under 3 seconds, and confirming that database queries remain efficient with more than 1 million workout records.

Quality Assurance Procedures:

- a) **Pre-release**
 Before launch, all P0 features must pass acceptance criteria, and the product must have zero critical bugs and fewer than five high-priority issues. Hardware must show at least a 95% sync success rate during beta testing, and performance requirements such as a 2-second app load time and 10-second sync must be met.
- b) **Post-release**
 Daily monitoring will track app crash rate, API error rate, and sync failure rate. Weekly reviews will analyze user-engagement metrics, NPS survey responses, and support-ticket patterns.
- c) **Continuous**
 Issues that appear in 20 or more support tickets will be immediately escalated to engineering. Features with adoption below 10% will be flagged for redesign or removal, ensuring the product remains focused on high-value functionality.

12. Metrics and Success Criteria

Validate Product-Market Fit and Value (engagement)

1. High weekly active user rate
 - a. **KPI:** Percentage of users who interact with AI recommendation systems (viewing, logging a workout, etc.) at least once per week
 - b. **Success criteria:** Maintain the 65%+ over the first ~3 months of Beta
2. Strong adherence to personalized plans
 - a. **KPI:** Adherence Rate – The number of AI-recommended sessions completed divided by the total number of AI-recommended sessions
 - b. **Success criteria:** Average of 80%+ among active users
3. High AI interaction frequency
 - a. **KPI:** Average daily interaction per active user (e.g. asking training questions, providing feedback, adjusting preferences, etc.)
 - b. **Success criteria:** Average ~3 or more AI interactions per user per week

Ensure Safety and Reduce Harm

1. Minimized injury reports
 - a. **KPI:** Harm Incident Rate – Number of self-reported physical injuries, overtraining incidents, or mental health distress that are related to AI recommendations
 - b. **Success criteria:** The HIR must be less than 2% of weekly active users.
2. Positive coach validation
 - a. **KPI:** Qualitative feedback score from coaching reviewers on the safety and soundness of training plans
 - b. **Success criteria:** 4.5+ out of 5 across all reviewed plans for safety/soundness

Prove Retention & Customer Loyalty

1. Strong 30-day retention
 - a. **KPI:** Percentage of users who return to the app 30 days after their initial sign-up date
 - b. **Success criteria:** Achieve a rate of at least 40%
2. High Net Promoter Score
 - a. **KPI:** NPS measured after users who completed their first training cycle
 - b. **Success criteria:** Achieve a NPS of +45 or higher

13. Go to Market

Target Market & Positioning

Start with **high-performing endurance athletes**, especially Ironman triathletes and serious aspirants, then expand to “weekend warriors” who follow extreme-performance creators. Positioning: *“The AI coach and band for people who train like this is their second job.”* The Endure Band is both the data engine for the AI coach and a visible badge of belonging to a committed endurance community.

Distribution & Acquisition

Primary channel is creator-led distribution:

- Partner with a small set of Ironman influencers/coaches as product collaborators and launch partners.
 - They create content (“How I’m using WellWave for my next Ironman”) and drive traffic to creator-branded landing pages with limited cohort spots.
 - Secondary: “do hard things” creators (Goggins-esque) whose audiences sign up for marathons/ultras and want structure.
- Sales are direct-to-consumer via our site/app with rev-share links for each creator.

MVP / First Release

MVP = Endure Band (comfortable, screenless sensor) + app with:

- Athlete onboarding (background, goals, training history),
- Weekly training plan and AI insights,
- Lightweight social feed for each cohort.

We launch **2–3 small cohorts** (50–100 athletes each) through our initial influencers and treat them as high-touch pilots.

Feedback & Evaluation

Each cohort gets a private Slack/Discord for support and feedback. After 3–6 months we decide to **proceed, pivot, or perish** based on:

- Activation (most buyers complete onboarding and log ≥ 10 workouts in month one),
- Engagement/retention (strong weekly use, ongoing reading of insights),
- Organic pull (referrals + influencers wanting more cohorts).

Strong signals → scale to more creators and adjacent sports; mixed signals → refine niche/positioning or features; weak demand and usage after iteration → drastically re-scope or shut down the hardware-focused approach.

14. References: see this document for full reference materials:

<https://docs.google.com/document/d/1T7NZoVSYcF0oc-iDm2t5kr8IzelAclQ4rVZ4JBKkyFM/edit?tab=t.6poy9ds0v2jb>

Competitive Analysis:

We synthesized insights from a team competitive analysis comparing:

- Oura Ring: discreet form factor, strong sleep/readiness analytics, hybrid hardware + subscription model.
- Apple Watch: broad health metrics, large app ecosystem, mass-market appeal, optional Fitness+.
- Whoop: subscription-first model, screenless strap, strain/recovery analytics for serious athletes.
- Strava: social/competitive platform (segments, leaderboards) with freemium + premium tiers.
- Apple Health: free data-aggregation hub with privacy-first positioning and deep interoperability.

Secondary Research:

Desk research included app-store reviews and Reddit communities (r/FitnessTrackers, r/AppleWatch, r/Whoop). Key themes included:

- High subscription fatigue (especially with Whoop).
- Frustration with unclear or non-actionable insights.
- Demand for schedule-aware, context-aware training recommendations.
- Need for integrated guidance rather than scattered third-party tools.