

OPTICLIMB

PERFORM BETTER. CLIMB HIGHER.



Meet Our Team



NUNO LOURENÇO
The Climbing Market Specialist



HUGO VARANDAS
Embedded Systems & AI
Integration



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Hardware Precision Expert



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IoT Systems Architect



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Business Strategy Lead



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Operations & Execution



Training based on "**feeling**":
difficult to measure actual fatigue
levels objectively.



Hard to compare betas and rest
effectiveness remains unclear for
climbers.



Coaches lack objective data - no
real-time fatigue tracking tools
exist.

The Problem

Key Findings from Interviews

+50 CLIMBERS INTERVIEWED | +75% INTERESTED IN WEARABLE TRACKING

01

FOREARM FATIGUE

Forearm fatigue is the main limitation affecting climbing performance

02

TRAINING DECISIONS

Training decisions are currently subjective and lack data support

03

TARGET ADOPTERS

Intermediate & advanced climbers are the main adopters

04

USER NEEDS

Users want objective performance data to guide training

Current Tools Are Incomplete



OPTICLIMB : THE SOLUTION



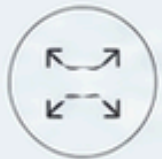
COMFORTABLE FIT

Ergonomic design that adapts to your arm for maximum comfort.



EMG FATIGUE DETECTION

Advanced EMG sensors detect muscle fatigue in real time.



STRETCH SENSOR TECHNOLOGY

Precision stretch sensors track forearm movement and strain.



DESIGNED FOR CLIMBERS

Built for performance, durability and the demands of climbing.



LIVE DATA SYNCED TO MOBILE APP

Seamlessly connects via Bluetooth to the Opticlimb app.



REAL-TIME PERFORMANCE MONITORING

Live insights to help you train smarter and climb stronger.



Product Offerings



Free

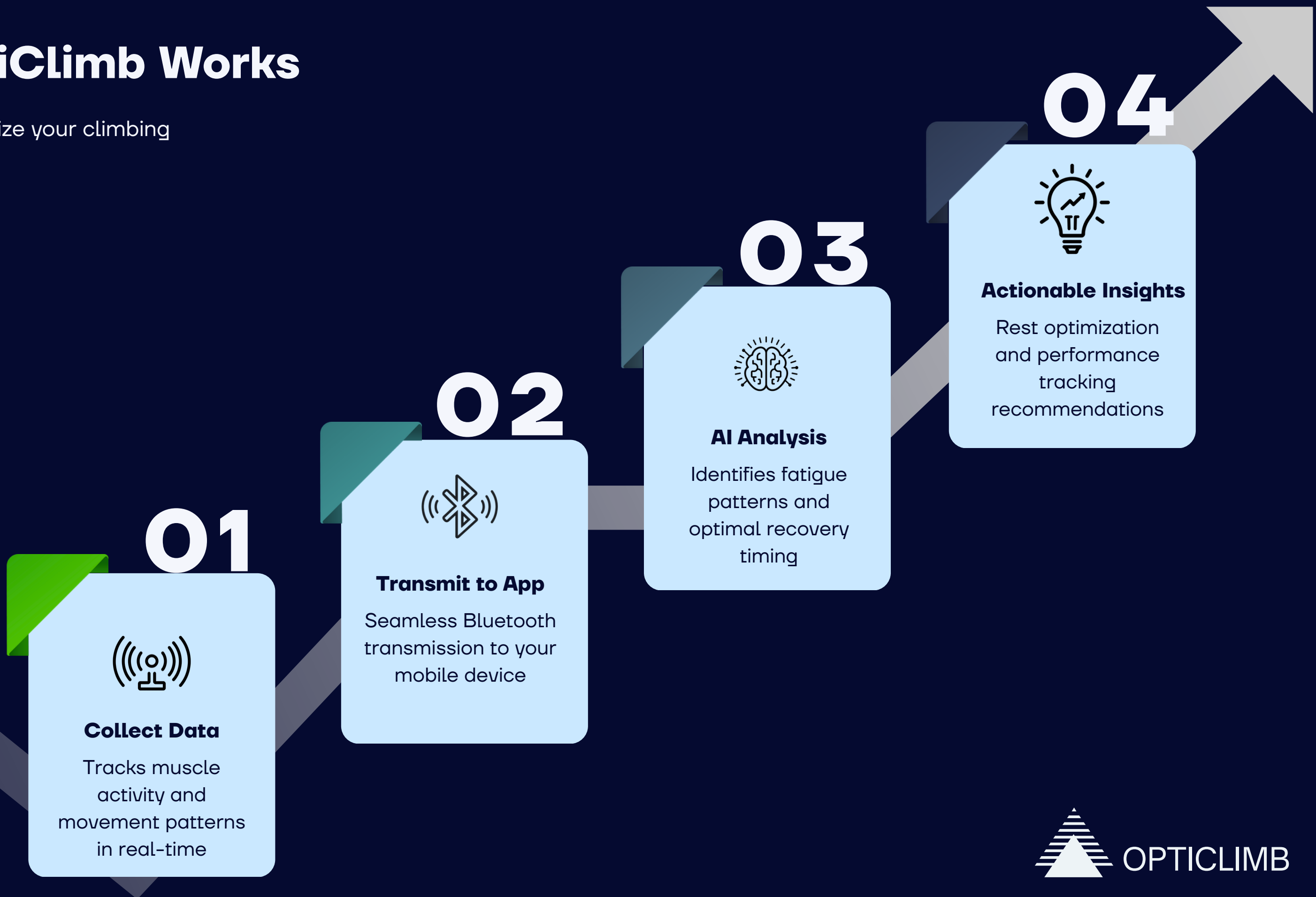
Premium

Oticlimb offers a scalable product model, combining **core performance monitoring** features with **premium AI-driven** insights and training optimization tools.

| Free | Premium |
|---|--|
| <div data-bbox="949 515 1116 703"></div> <div data-bbox="1149 515 1549 759"><h3>1. Muscle Activation Level</h3><p>Real-time EMG intensity</p><ul style="list-style-type: none">See how active your forearm muscles are during the session.Measured in % of activation.</div> <div data-bbox="1582 506 1882 797"><p>Muscle Activation</p><p>68% ACTIVATION</p></div> | <div data-bbox="2015 478 2182 647"></div> <div data-bbox="2215 478 2682 665"><h3>1. Grip Efficiency Analysis</h3><p>Detect inefficient over-gripping</p><ul style="list-style-type: none">AI analyzes your grip usage on each hold.See how much extra force you are using.</div> <div data-bbox="2748 469 3098 712"><p>Grip Efficiency</p><p>78% Efficiency Score</p><p>You: 78% Optimal: 100%</p></div> |
| <div data-bbox="949 900 1116 1069"></div> <div data-bbox="1149 900 1549 1134"><h3>2. Fatigue Score</h3><p>Estimated forearm fatigue</p><ul style="list-style-type: none">Track your fatigue level throughout your session.Score from 0 (fresh) to 100 (max).</div> <div data-bbox="1582 872 1882 1172"><p>Fatigue Score</p><p>72 / 100</p><p>High Fatigue</p></div> | <div data-bbox="2015 759 2182 928"></div> <div data-bbox="2215 759 2615 1003"><h3>2. Muscle Load Distribution</h3><p>Compare muscle usage patterns</p><ul style="list-style-type: none">Analyze how your forearm muscles are working.Compare dominant vs non-dominant arm.</div> <div data-bbox="2748 750 3098 1003"><p>Load Distribution</p><p>58% Left Arm 42% Right Arm</p></div> |
| <div data-bbox="949 1275 1116 1444"></div> <div data-bbox="1149 1275 1549 1566"><h3>3. Recovery Time Estimate</h3><p>Recommended rest time</p><ul style="list-style-type: none">Get a personalized recovery recommendation between attempts.Based on your fatigue level.</div> <div data-bbox="1582 1256 1882 1575"><p>Recovery Time</p><p>3:00 min</p><p>Recommended Rest</p></div> | <div data-bbox="2015 1050 2182 1219"></div> <div data-bbox="2215 1050 2648 1294"><h3>3. Performance & Injury Risk Trends</h3><p>Long-term fatigue and overload analysis</p><ul style="list-style-type: none">Monitor fatigue accumulation and progression over time.Get alerts for potential overload or injury risk.</div> <div data-bbox="2748 1050 3098 1285"><p>Fatigue Trend (7 Days)</p><p>Injury Risk: Moderate</p></div> |
| | <div data-bbox="2015 1341 2182 1510"></div> <div data-bbox="2215 1341 2665 1679"><h3>4. Training Recommendations</h3><p>Personalized insights to train smarter</p><ul style="list-style-type: none">Get AI-driven training recommendations based on your data.Identify effective resting positions and route sections requiring caution.Real-time fatigue monitoring to guide coaching and training decisions.</div> <div data-bbox="2748 1341 3098 1650"><p>Training Recommendations</p><p>Focus on:</p><ul style="list-style-type: none">Improve finger enduranceIncrease rest time on overlapping sectionsOptimize pacing on crux moves</div> |

How OptiClimb Works

Four steps to optimize your climbing performance



.. Customer Segments

Coaches

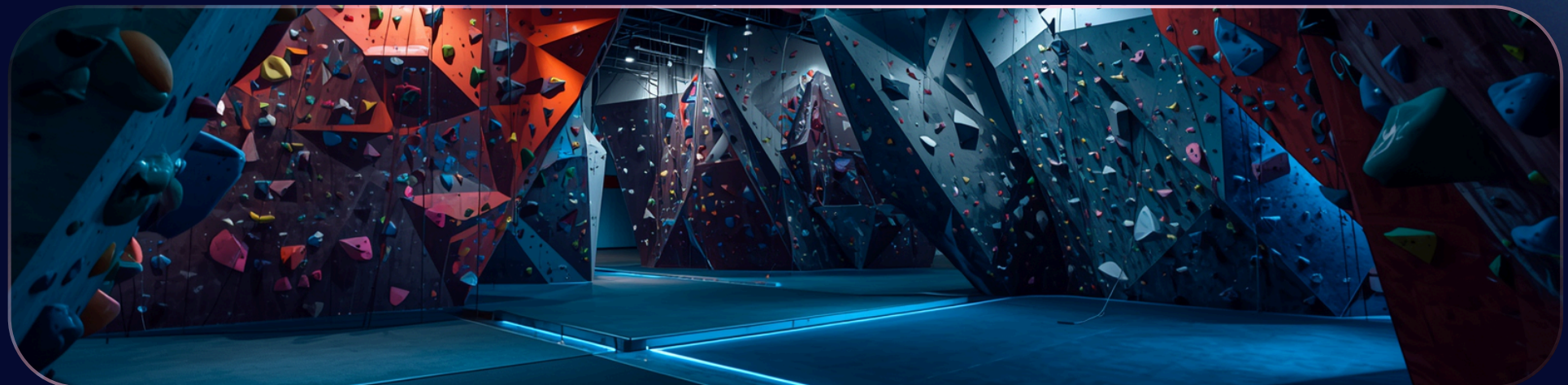
- Athlete monitoring
- Training analysis
- Progress tracking

Climbing Gyms

- Product exposure
- Testing channel
- Community engagement

Climbers

- Performance optimization
- Beta comparison
- Fatigue management



Value Proposition



PRODUCTS AND SERVICES

- Wearable Forearm Sensor
- Mobile/Web App
- Ability to share data in real time



PERFORMANCE BENEFITS

- Performance Optimization
- Faster Progression
- Data for Coaches
- Personalized training



HEALTH BENEFITS

- Fatigue Data
- Recovery timing
- Injury Risk detections

Business Model Canvas



KEY PARTNERS

Climbing gyms
Coaches
Athletes
Sensor suppliers

VALUE PROPOSITION

Real-time fatigue insights
Objective climbing analytics
Personalized training support

CHANNELS

Climbing gyms
Events & competitions
Influencers
Website & social media

KEY ACTIVITIES

Hardware development
AI/data analysis
Mobile app development
Marketing & partnerships

REVENUE STREAMS

Device sales
Premium analytics subscription
Coaching Features

CUSTOMER SEGMENTS

Intermediate climbers
Advanced climbers
Coaches

KEY RESOURCES

Sensor technology
AI expertise
Mobile app platform
Climbing network

CUSTOMER RELATIONSHIPS

Mobile self-service
Community engagement
Social media interaction

COST STRUCTURE

Hardware production
App development
AI development
Marketing

Go-To-Market Strategy

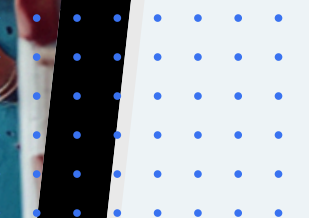
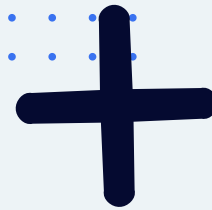
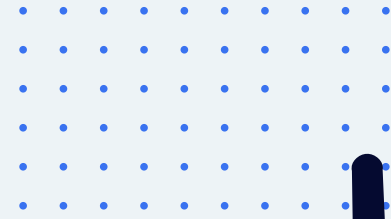
Climbing Gyms

Influencers & Athletes

Training organizations
(e.g. Lattice)

Events & Competitions

Website & social media



Revenue Streams

Device Sales

One-time wearable purchase. Premium forearm sensor with embedded technology for real-time fatigue monitoring and performance tracking during climbing sessions.



Premium Analytics

Advanced AI reports. Subscription-based access to intelligent dashboards, fatigue graphs, recovery scores, and personalized performance insights powered by machine learning.





Thank you!

OPTICLIMB
"TRAIN BEYOND FEELING"

IST Técnico Lisboa

