



# PosturePro

**Real – Time Posture Correction Wearable**

**Presented by Team – Innovate Genesys**

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# The Problem - The Silent Epidemic: Poor Posture

## Global Issue:

- WHO: 1 in 4 adults suffer from musculoskeletal issues.
- Poor posture linked to **chronic back** pain, neck pain, fatigue, reduced productivity.

## Economic Burden

Global back pain treatment costs ≈ \$134 Billion annually.

## Productivity Loss

Poor posture reduces focus & energy, leading to up to **32% drop in workplace productivity** and increased sick leave.



## Market Pain Points:

- **80% of IT** professionals report posture-related issues (“tech neck,” lumbar strain)
- Students & gamers spend **6–10 hrs/day seated** → long-term spinal problems.
- India has over **180 million** people with musculoskeletal pain issues
- Posture issues rising fastest in Asia due to rapid digital adoption and desk-bound lifestyles → a prime market for affordable solutions.



# Our solution - PosturePro: Your Personal Posture Guardian

**PosturePro** is a discreet, wearable device that monitors posture in real time. Worn on the neck, arm, or hip, it provides **gentle vibrations** as subtle reminders to correct slouching and **heat therapy**, helping users build healthy posture habits with comfort and intelligent tracking.



## Challenges and Our Solutions

- **Challenge:** Lack of awareness of poor posture during daily activities.
- **Solution:** Real-time monitoring and alerts, gentle haptic feedback and heat therapy for instant correction and comfort.
- **Challenge:** Expensive physiotherapy sessions for posture correction.
- **Solution:** Affordable wearable delivering continuous posture support and therapy.
- **Challenge:** People consider health - issues as secondary and neglect which can have severe long - term consequences.
- **Solution:** **PosturePro** works passively in the background, offering reminders without interrupting your work. It's a health solution that fits seamlessly into a busy schedule.



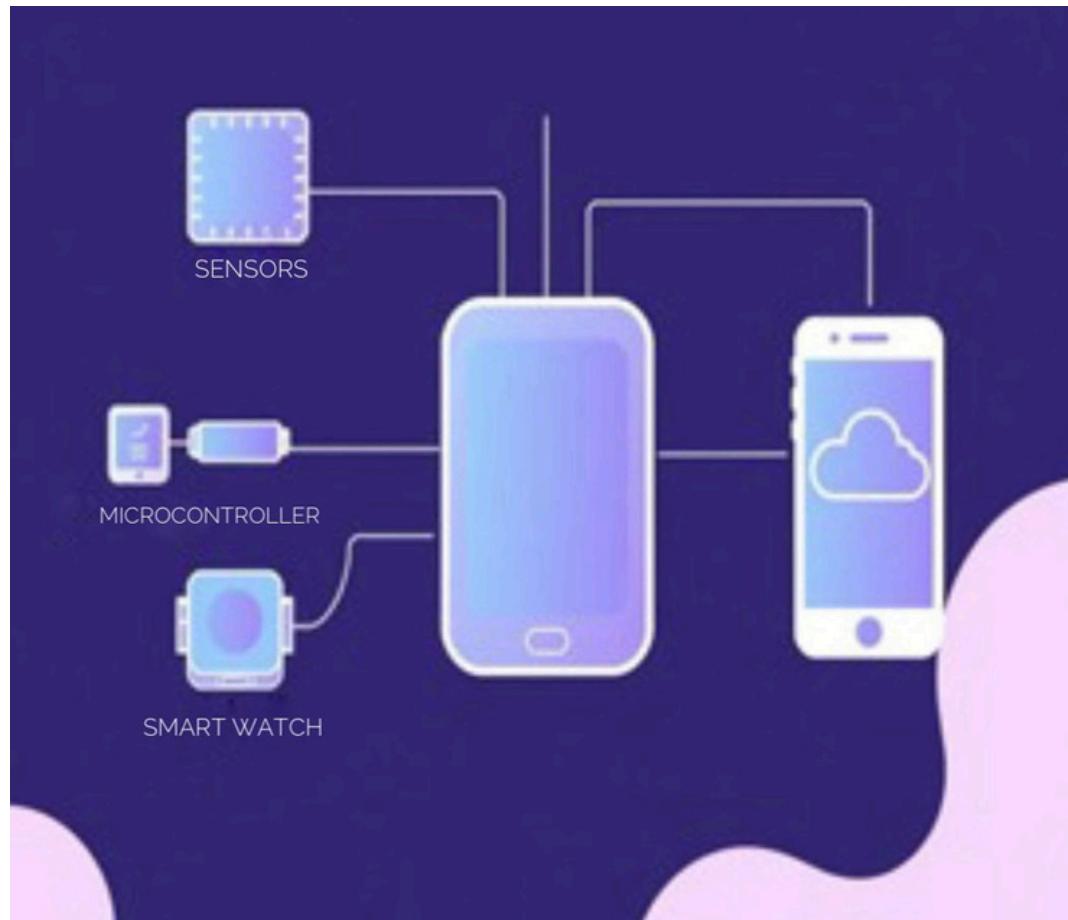
# Robust Tech Stack: Powering PosturePro

Our lean and efficient tech stack ensures PosturePro is both high-performing and cost-effective, translating to greater accessibility for our users.

## Hardware Components

- **MPU-6050** : Precise 6-axis accelerometer/gyroscope (**₹200**).
- **ESP32** : Low-cost, powerful microcontrollers for real-time processing (**₹300–₹500**).
- **Vibration Motor** : Effective haptic feedback mechanism (**₹50**).
- **Heating Pad** : Provides gentle therapeutic warmth to relax stiff muscles and improve blood circulation (~**₹150**).
- **3D Printed Clip**: Sustainable and customisable housing (**₹200**).

Our estimated **Total MVP Cost per unit**: ~**₹900–₹1200**.



## Software Architecture (Future Integration)

- **Flutter**: Cross-platform framework for seamless mobile app experience across iOS and Android.
- **Firebase**: Robust backend for secure and scalable posture data storage and user management.
- **Python**: Powers our AI model, enabling personalised feedback and sophisticated posture analytics.
- **BLE (Bluetooth Low Energy)** is used for efficient communication between device & app.
- **Posture detection logic** is embedded on the ESP32.



# PosturePro's Innovation and Target Audience

PosturePro addresses a universal need, appealing to various demographics who spend significant time seated or require postural support.

**Students:** Particularly crucial during intense study periods and exams, preventing slouching during long hours at desks.



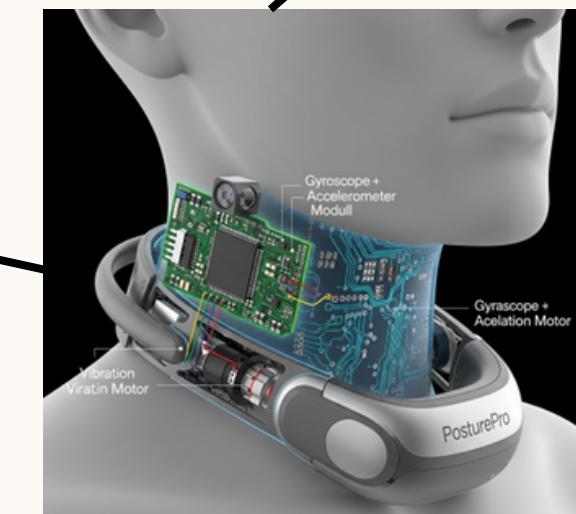
**IT Professionals & Remote Workers:** The growing demographic spending 8+ hours a day at computers, prone to "tech neck" and back strain.



**Elderly:** Offering gentle, consistent support to maintain better posture and reduce age-related postural degeneration and discomfort.



**Advanced Sensors:** Integrated Gyroscope and Accelerometer



**Mobile Integration:** Via Bluetooth, syncs with mobile app

**Instant Feedback:** Vibration Motor gives gentle alert

**Real-Time Analysis:** Microcontroller processing sensor data



# Marketing Plan: Positioning PosturePro in Users' Minds

## Target Market (Who is it for?)

- **Primary Users:** College students, desk workers, elderly (arthritis/back pain)
- **Secondary Users:** Post surgery and recovery patients, remote workers
- **Institutional Clients (B2B):** Physiotherapy clinics, hospitals, wellness centers.

## Pricing & Positioning

- **Manufacturing cost** ~ ₹400 (at scale).
- **Introductory Price:** ₹1,000 - ₹1,200 (under ₹2,000 to appeal to students)  
60% + gross margin. Break even in 8-10 months
- **Premium Version (Future):** ₹1,500 with voice assistant or AI routines

## Business Model

- **Direct Sales (B2C):** Online platforms (Amazon, Flipkart, PharmEasy).
- **Accessories / Add-ons:** Replacement pads, straps, wearable attachments.

## Market Opportunity

- **Global heating pad market:** \$5.8B by 2028 (6% CAGR).
- **Indian home healthcare market:** ₹1,000+ crore in 3 years.
- **Even 1% share in Indian market** = multi-crore revenue potential.



# Our Competitive Edge: Setting PosturePro Apart

While other devices exist, PosturePro distinguishes itself through unique features that offer unparalleled user experience and efficacy.

Feature	PosturePro (Wearable + App)	Smart Belts/Straps	Posture Apps Only
Real-Time Correction	✓ Gentle vibration alert	✓ Elastic tension	✗ Only suggests tips
AI-Powered Insights	✓ Personalized posture trends	✗ Static feedback	⚠ Limited
Comfort & Design	✓ Lightweight clip/band	✗ Bulky, visible	✓ App-only
Posture Score & Analytics	✓ App-integrated scoring	✗ Not available	✓ Basic score tracking
Customizable Alerts	✓ Vibration modes, timing	✗ Fixed tension	✗ No real-time alerts



# Launch & Promotion Strategy: PosturePro

Not just a wearable — it's your **pocket-sized wellness coach** that nudges you like your Nani, tracks your back health like a **fitness trainer**, and keeps you accountable like a best friend.

Phase	Strategy	Marketing Focus
<b>Phase - 1</b>	Pilot launch (100 units) via clinics & online platforms	Targeted digital ads; awareness campaigns for early adopters
<b>Phase - 2</b>	Partnerships with physiotherapists, doctors & hospitals	Healthcare influencer tie-ups; trust-building in medical community
<b>Phase - 3</b>	Nationwide retail distribution through medical stores	Broad digital campaigns targeting students, elderly & working professionals

# Thank you 🙏

“Sit Straight. Stay Strong.”

We are open to questions and feedback!

With Love ❤️

Team Innovate Genesys

