

**HEALTHCARE
TRACK - P.S. 2
(OPEN INNOVATION)**

SHAKTHI (शक्ति):

**AI-Powered
PCOS
Management
Ecosystem**



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**made in
mumbai**

MUMBAI HACKS

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**Your 24/7 Healthcare
Squad →**

**Because PCOS Needs More
Than 'Lose Weight'**

PROBLEM + TARGET AUDIENCE

The Brutal Reality of PCOS Care

Polycystic Ovary Syndrome affects millions of women, yet the healthcare system fails them at every turn. The fragmentation, confusion, and lack of support create devastating consequences for patients navigating this complex condition.

Market Pain Points

- 85% visit 3-5 doctors receiving conflicting advice with zero coordination between specialists
- 67% non-adherent to medications leading to treatment failure within 6 months
- 45% know nothing about their condition after diagnosis
- 40% suffer depression/anxiety with mental health completely ignored
- ₹2-5 lakh wasted on uncoordinated fertility treatments

Primary Audience

Urban working women aged 25-40 with PCOS diagnosis

Key Challenges

No time for monthly doctor visits, gym routines, or meal prep

Why Existing Solutions Fail

Doctors: 5-minute consultations with no follow-up or continuity of care

Apps (Flo, Clue): Generic 28-day cycles that ignore PCOS-specific needs

Google/Facebook: Misinformation overload filled with pseudoscience and unverified claims



Polycystic Ovary Syndrome (PCOS)



10M

PCOS Women in India



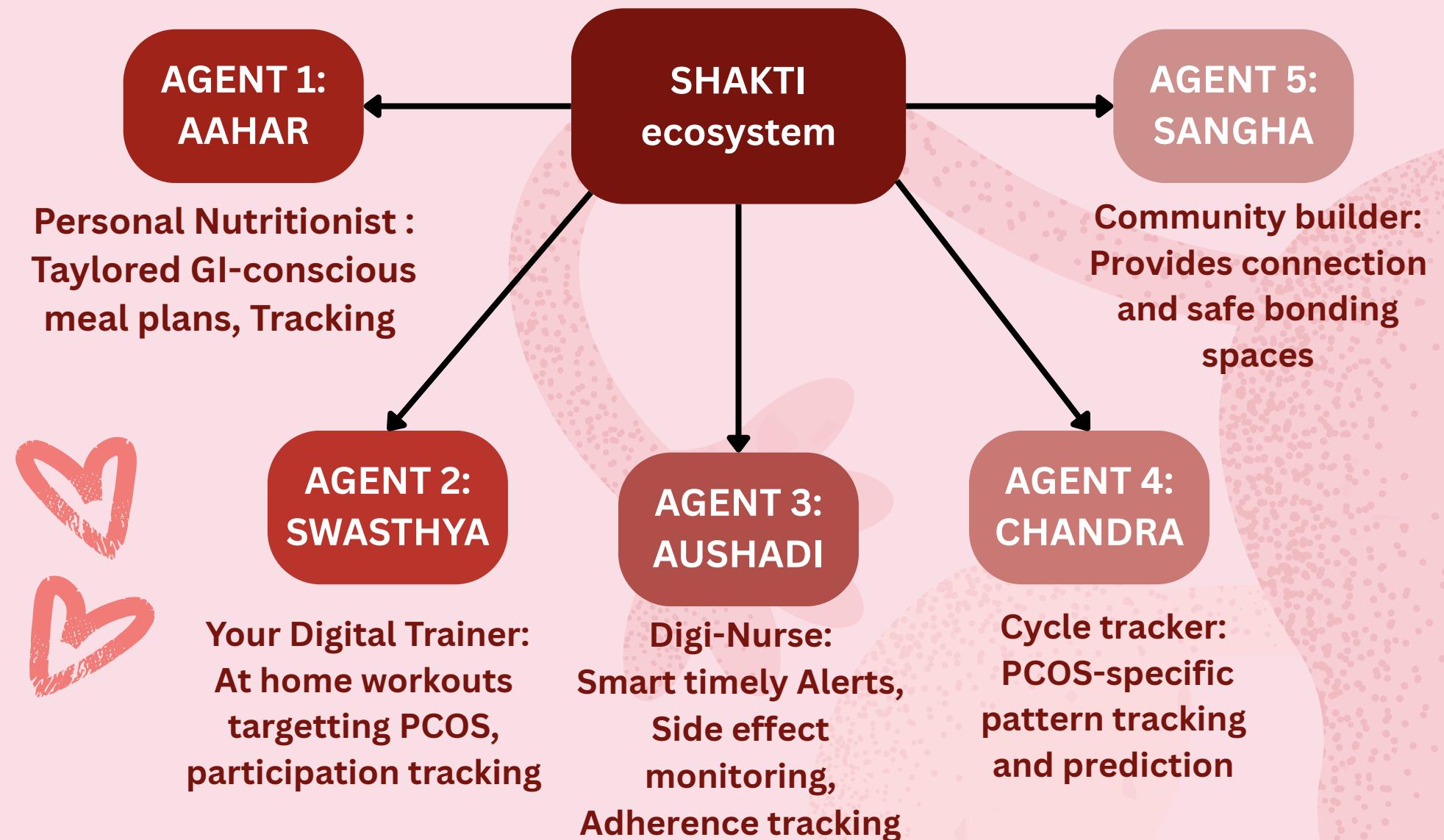
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Global Market Size

Solution →

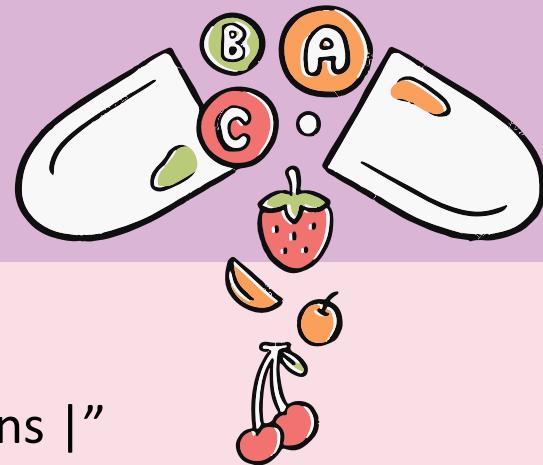
THE SHAKTI SOLUTION

We provide a comprehensive and compassionate solution for PCOS care; a coordinated multi-agent AI system on n8n + Gemini 2.0 flash, delivering personalized support across every critical aspect of PCOS via WhatsApp.



AGENT 1

* AAHAR (Nutrition)



🔔 Timely Meal Nudges via WhatsApp

- E.g., "7 AM: Moong dal chilla + mint chutney | GI 38 | 15 mins |"
- Matches user's schedule + tracks missed meals

🧠 Adaptive Learning + Feedback Loop

- Learns from user input: "Skipped lunch – was out" → suggests portable options next time
- Adjusts future reminders & meal types based on habits and adherence

📊 Integrated Tracking

- Auto-logs meals eaten, skipped, or substituted
- Tracks glycemic load, calorie intake, and nutrient balance over time
- Flags low adherence or symptom flare-ups for early intervention

💡 Outcome:

- 85% meal plan adherence (vs. 40% with static diet charts)
- Personalized, real-time accountability that scales



AGENT 2

* FIT (Exercise)



FIT – Your Adaptive Fitness Coach

Exercise guidance for PCOS needs to be specific, not generic. "Move more" doesn't work when your body's energy shifts with your cycle.



Progressive Home Workouts

Zero equipment needed. Start with 15-minute walks, build to 25-minute HIIT and strength training using household items. Every routine designed for small spaces — your bedroom becomes your gym.



Cycle-Adapted Intensity

Synced with CHANDRA. High-energy HIIT during ovulation, gentle yoga during your period. Example: "Day 2 of period detected → replacing HIIT with 15-min stretching routine."



Real-Time Tracking

Integrates with Google Fit and Fitbit. Auto-logs steps and heart rate. Flexible rescheduling keeps you consistent: "Missed morning workout? Try 10 mins after dinner."



Proven Results

75% workout completion compared to just 30% with generic fitness apps. Evidence-based protocols designed specifically for PCOS management through strength training and HIIT.

AGENT 3

Context-Aware Reminders

- Not just "8 PM alarm" → "Take Metformin WITH dinner to avoid nausea"
- Multi-channel: WhatsApp → SMS → Push → Phone call (escalating)



* AUSHADHI

Your Medication Guardian



Side Effect Monitoring

- Day 3 check-in: "Any stomach issues with Metformin?"
- Severity assessment: Mild → coping tips | Severe → auto-alert doctor
- Example: "Nausea common in week 1. Try yogurt. If vomiting, I'm alerting your doctor NOW"



Smart Adherence System

- After 3 misses: "What's happening? A Forgot B Side effects C Other"
- Auto refill reminders: "Metformin pack ends in 3 days. Order from PharmEasy?"
- Doctor dashboard: Monthly adherence report 95% vs. 33% national average)



AGENT 4

* CHANDRA

Smart Cycle Tracking



PCOS causes irregular menstrual cycles, causing every individual to have varying patterns

- **PCOS Specific ML Prediction**
 - LSTM model trained on PCOS cycles, does not assume generic 28-30 day cycles
 - Informative predictions based on individual's pattern
 - Example: "Your average: 42 days. Next period: Dec 19 [85% confidence]"
- **Cycle Phase Intelligence**
 - Estimates menstrual, follicular, ovulatory, and luteal phases based on user's learned cycle pattern.
 - Sends intuitive alerts and care tips via WhatsApp for each phase.
 - Example: "Luteal Phase: Energy may dip; focus on rest and recovery."
- **Adaptive Learning & Feedback Loop**
 - Adapts with user input [period start/end].
 - Accuracy improves with every cycle through continuous learning.
- **Cross-Agent Cycle Data Sharing for Ultimate Intelligent Support**
 - Shares cycle phase with FIT → dynamically adjusts workout intensity.
 - Sends hormone insights to AAHAR → adds iron-rich foods during periods.
 - Generates 6-month doctor-ready reports for tracking cycle trends and progress.

AGENT 5

Smart Matching Algorithm

- **Matches by:** Age 20s/30s/40s), City, Main concern (fertility/weight/acne), PCOS type
- **Example:** "Matched you with 'Mumbai PCOS Warriors' 50 women, ages 25-35, TTC focus"

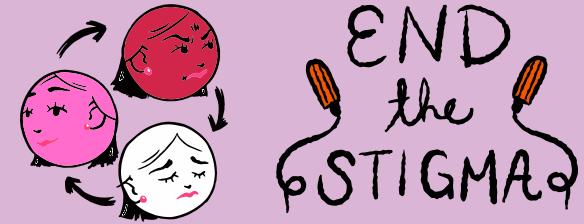


* SANGHA (Community)



AI-Moderated WhatsApp Group

- **Ground rules:** No medical advice, no product sales, empathy-first
- **GPT4 moderation:** Flags misinformation ("Fennel water cures PCOS" → "FALSE Here's evidence")
- Human escalation for toxic content



Community Features

- **Victory Wall:** "I feel so much at peace, light and relaxed"
-
- **Weekly Expert AMAs:** Live Q&A with gynaecologists, nutritionists (recorded replays)
- **Local meetups:** "Delhi PCOS Meetup | Sunday 5 PM | Cafe Coffee Day CP | 12 confirmed"



GTM



GTM Pillar

Strategy

Target Users

Indian women (16–40) with PCOS; Tier 1 & Tier 2 cities

Channels

Influencer-led campaigns (health, PCOS, fitness), Instagram & YouTube

Partnerships

Gynae & fertility clinics, smart wearable brands (boAt, Noise, etc.)

B2B Clinic Model

Co-branded onboarding in clinics with monthly per-patient licensing

Languages

Hindi, English

Revenue



Plan Type	Price (INR/mo)	Target Users	Year 1 Users	Gross Margin
Freemium	₹ 0	Teen Onboard	50,000	N/A
Basic	₹ 199	Teens, young adults	10,000	~60%
Standard	₹ 399	Adults	7,500	~70%
Premium+Coach	₹ 699	Adults + Coach	2,500	~65%
B2B (Clinics)	₹ 599	Hospitals	20 clinics × 100 pts = 2,000	~70%