Hawana: Indoor Air Safety Reimagined

Portable monitoring that turns invisible risk into immediate action.

- Detects **CO_2**, **PM2.5**, and **VOC** in real-time
- Simple risk levels replace complex data
- Portable for homes, gyms, cars, offices

The Invisible Risk in Closed Indoor Spaces

Indoor air hazards kill silently—we make them visible.

- Most people can't detect poor indoor air until symptoms start
- In closed, air-conditioned rooms, pollutants can build up quickly
- Dust (PM2.5/PM10) and poor ventilation (CO_2) are common triggers
- Without monitoring, there is no early warning or clear "when to ventilate"
- Our system detects risk in real time and triggers ventilation and alerts

Why Indoor Air Matters in GCC Homes & Closed Spaces

Three high-impact triggers for asthma/allergy—one system that detects, alerts, and triggers ventilation.

PM2.5/PM10: Dust & Sand Exposure

Fine dust in closed, air-conditioned rooms drives allergy and asthma symptoms—especially during dusty seasons.

Action: Purify / reduce dust exposure

CO_2: Hidden Poor Ventilation

Rising CO_2 is a clear signal of insufficient fresh air in crowded indoor spaces—often paired with higher indoor irritants.

Action: Ventilate automatically

VOCs: Irritants from Indoors

Cleaning products, fragrances, and new materials release VOCs that can trigger respiratory irritation and headaches.

Action: Reduce VOC sources + ventilate

Risk Peaks in Predictable Indoor Scenarios

Measurable triggers, repeatable patterns, preventable flare-ups.

Dust events & sand storms: PM spikes indoors

Fine particles enter and accumulate in closed, air-conditioned rooms.

Action: Purify / reduce dust exposure

Crowded indoor spaces: CO_2 rises fast

High occupancy + low fresh air signals poor ventilation.

Action: Ventilate automatically

Cleaning & fragrances: VOC irritation peaks

Sprays, disinfectants, and perfumes can trigger respiratory irritation.

Action: Ventilate + reduce VOC sources

Closed rooms: PM2.5 builds up over time

Without airflow, particles remain suspended and accumulate.

Action: Auto-ventilation + purifier boost

Who Needs Hawana Most?

- **Individuals with Chronic Health Conditions.**
- **Families.**
- **Facility operators (schools, gyms, studios, event halls).**
- **Venue managers (classrooms, clinics, meeting rooms).**

Customer Personas: Deep Motivation

Each persona has urgent, measurable pain points.

Salwa, 35 | Concerned Parent (Families)

- Worried about children's allergies and asthma in seasonal changes.
- Seeks proactive solutions for a healthy home environment.
- Values peace of mind knowing her family breathes clean air.

Mohammad, 28 | Gym Owner (Facility Operator)

- Responsible for member health and safety in high-activity areas.
- Needs to comply with health regulations and provide a safe space.
- Wants to attract and retain members with a commitment to wellness.

Amal, 42 | Individual with Chronic Condition

- Suffers from COPD, air quality directly impacts her breathing.
- Needs real-time monitoring to avoid triggers and emergencies.
- Desires a comfortable, safe home environment for her health.

Ibrahem, 32 | School Administrator (Venue Manager)

- Manages air quality for hundreds of students and staff daily.
- Aims to reduce absenteeism due to airborne illnesses.
- Wants to provide an optimal learning environment for all students.

Target Market: MENA — Execution Focus on GCC

High indoor exposure, strong purchasing power, and rapid adoption of safety and smart-home tech.

Why MENA

- +106M increase in urban population by 2030
- Indoor air pollutants often 2–5× higher than outdoors
- Dust and indoor exposure are strongly linked to asthma and respiratory outcomes

Why Start with GCC

- Higher willingness-to-pay + faster adoption of safety/health tech
- Dense B2B demand (facilities, clinics, schools, gyms, fleets) enables efficient sales
- Clear ROI + high-trust use cases (compliance, child safety, workplace productivity)

Health Proof Points

+106M urban by 2030

Asthma ~7.6% (Gulf cluster)

Qatar children asthma ~19.8%

Beachhead Buyers

FACILITIES · CLINICS · SCHOOLS · GYMS · FLEETS

Large TAM with a Disciplined Entry Path

Phased go-to-market: start with a focused beachhead, expand across the GCC, then scale MENA-wide.

Year 1–2

Year 3–4

Year 5+

BEACHHEAD

Year 1–2

Beachhead

- Launch in 2–3 pilot cities with anchor B2B partners
- Focus on early adopters (families, clinics, gyms, schools)
- Prove outcomes: cleaner air + measurable ventilation improvements

Key Targets:

Devices: 5K (target)

Subscriptions: 2K (target)

Revenue: $1–2M (target range)

EXPAND

Year 3–4

Regional Expansion

- Scale across the GCC via B2B + retail distribution
- Standardize onboarding, QA, and support playbooks
- Expand integrations (smart plugs, window actuators, dashboards)

Key Targets:

Devices: 50K (target)

Subscriptions: 20K (target)

Revenue: $10–20M (target range)

SCALE

Year 5+

MENA-Wide Penetration

- MENA-wide penetration across consumer + enterprise channels
- Enterprise contracts (schools, hotels, offices) + consumer retail
- Multi-product roadmap (monitoring + automation + compliance reporting)

Key Targets:

Devices: 500K+ (target)

Subscriptions: 200K+ (target)

Revenue: $100M+ (target range)

Hawana: The Solution

Advanced sensing, translated into clear action

Real-Time Detection

Continuously measures multiple indoor air hazards (CO_2, PM2.5, VOC) using calibrated sensors

Simple Risk Levels

Raw sensor data is processed into clear Green / Yellow / Red risk states

Portable & Affordable

Compact, battery-powered design enables use across homes, vehicles, and facilities at a lower cost than fixed systems

Actionable Alerts

Context-aware alerts recommend immediate actions (ventilate, leave area, reduce occupancy)

Prevention, Not Reaction

Shifts air safety from incident response to early prevention

Safer Homes & Facilities

Provides continuous safety visibility across residential and shared indoor spaces

Improved Comfort & Performance

Maintains air conditions that support health, focus, and productivity

How Hawana Works: Four Steps

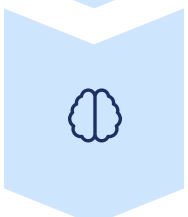
From sensing to action in seconds.

Place

Place the device in any indoor space, vehicle, or facility

Detect

Integrated sensors continuously measure CO_2, PM2.5, and VO in real time



Translate

Embedded intelligence analyzes sensor data and translates it into simple risk levels

Alert

Users receive real-time alerts with clear, actionable guidance

Why Hawana Wins

Competitors sacrifice usability, portability, or cost.

Why Competitors Fail

- **Home devices:** Fixed, expensive, complex data
- **Car sensors:** Passive, no alerts, no action
- **Apps alone:** No real-time sensing
- **Not portable:** One location, one use case

Hawana's Advantage

Portable: One device, many environments

Intuitive App: Understand air quality instantly

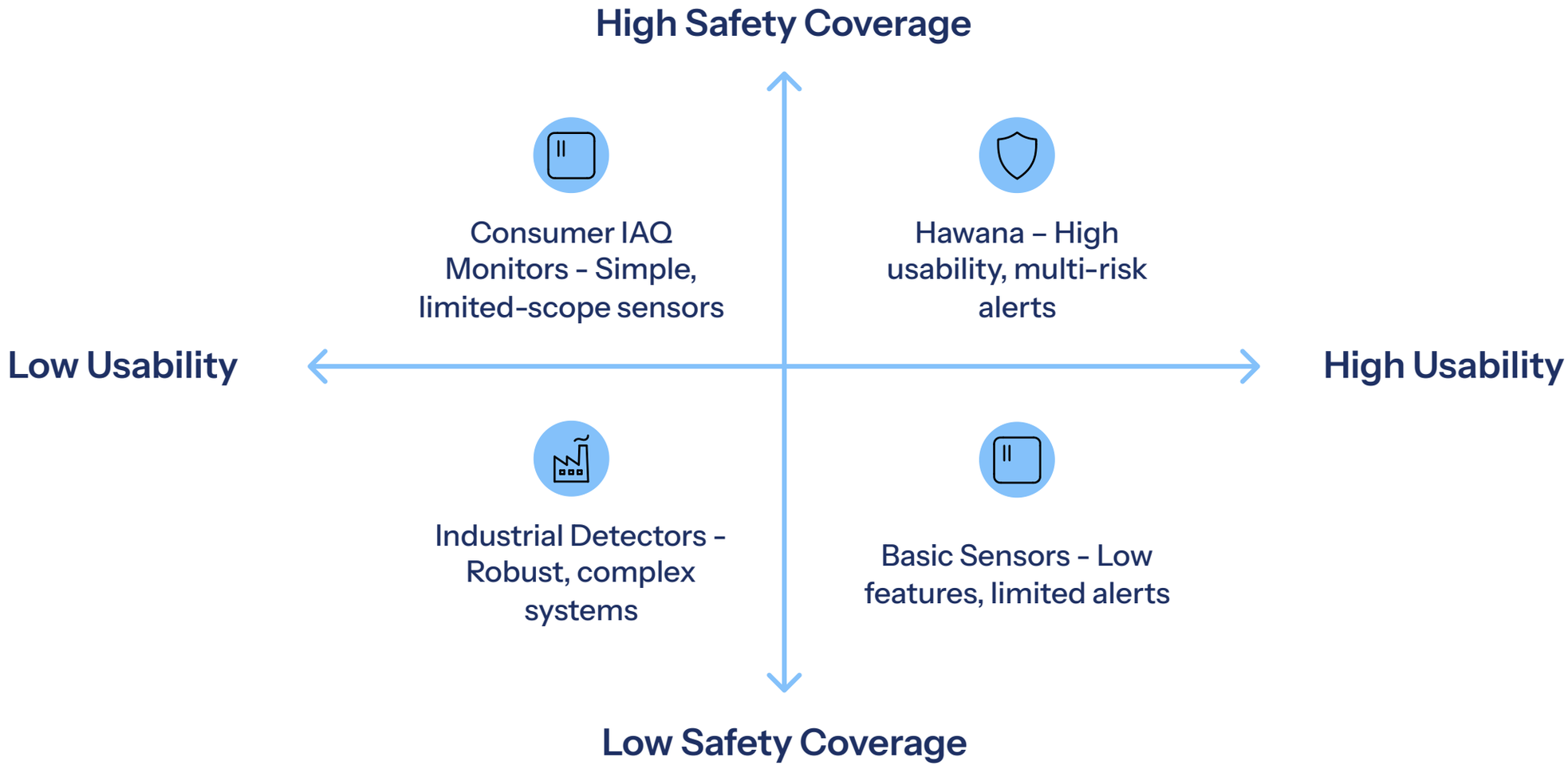
Affordable: $100–200

Actionable: Clear guidance, not just data

Competitive Positioning: Clear Winner

Hawana leads in usability and portability.

We map solutions by usability and portability. Hawana is the only solution strong in both.



Revenue Model: Blended Approach

Hardware sales + recurring subscriptions = sustainable growth.

Revenue Streams

- **Device sales.**
- **Premium subscriptions.**

Why This Works

Hardware drives initial adoption

Initial product sales provide immediate capital and market entry.

Subscriptions create recurring revenue

Ensures sustained income and fosters long-term customer relationships.

Pricing: Accessible Entry, Clear Upgrade Path

Every customer segment has a tier that fits.

Consumer Basic

$199 device + free app

Individual air quality monitoring.

Consumer Premium

$199 device + $10/month analytics

Advanced data insights for personal use.

Business Starter

5 devices + $50/month dashboard

Small business air quality management.

Enterprise

Unlimited devices + $100/month + API access

Comprehensive, integrated solutions for large organizations.

Cost Structure: Path to Profitability

Prototype costs drop 60% at scale.

1

Prototype Phase

- Small-batch component sourcing at premium prices
- Multiple enclosure iterations for optimization
- Extensive testing and validation cycles
- Current unit cost: **~$130**

2

Scaled Manufacturing

- Volume discounts on components (40% reduction)
- Streamlined assembly and QA processes
- Tooling investment amortized across units
- Target unit cost: **~$75** at 50K units

Detailed Development Roadmap

Seven critical phases guiding our innovation from concept to market.

Milestone 1: Market & User Requirement Discovery

Thorough research to define market needs and user expectations.

Milestone 2: End-to-End System Architecture Design

Developing a robust and scalable architecture for the entire Hawana system.

Milestone 3: Hardware Platform Selection

Choosing optimal components and platforms for device performance and cost-efficiency.

Milestone 4: Full-Stack Software Development

Building intuitive applications, backend infrastructure, and embedded firmware.

Milestone 5: Integration, Validation & Quality Assurance

Ensuring seamless integration of hardware and software, followed by rigorous testing.

Milestone 6: Pilot Launch & Real-World Evaluation

Deploying initial units for testing in live environments and gathering critical feedback.

Milestone 7: Scalability, Performance Optimization & Feature Expansion

Preparing for mass production, refining performance, and planning future enhancements.

Meet Our Team

The founders and core team driving Hawana's vision—hardware expertise, software excellence, and market execution experience.

Mohammad Ajaj

Hardware Engineering Lead

Mohammad Hamayl

Software & Hardware Integration

Ibrahim Abu Hania

Software & Mobile Lead

Bara Abu Qara

Business Lead & Strategy