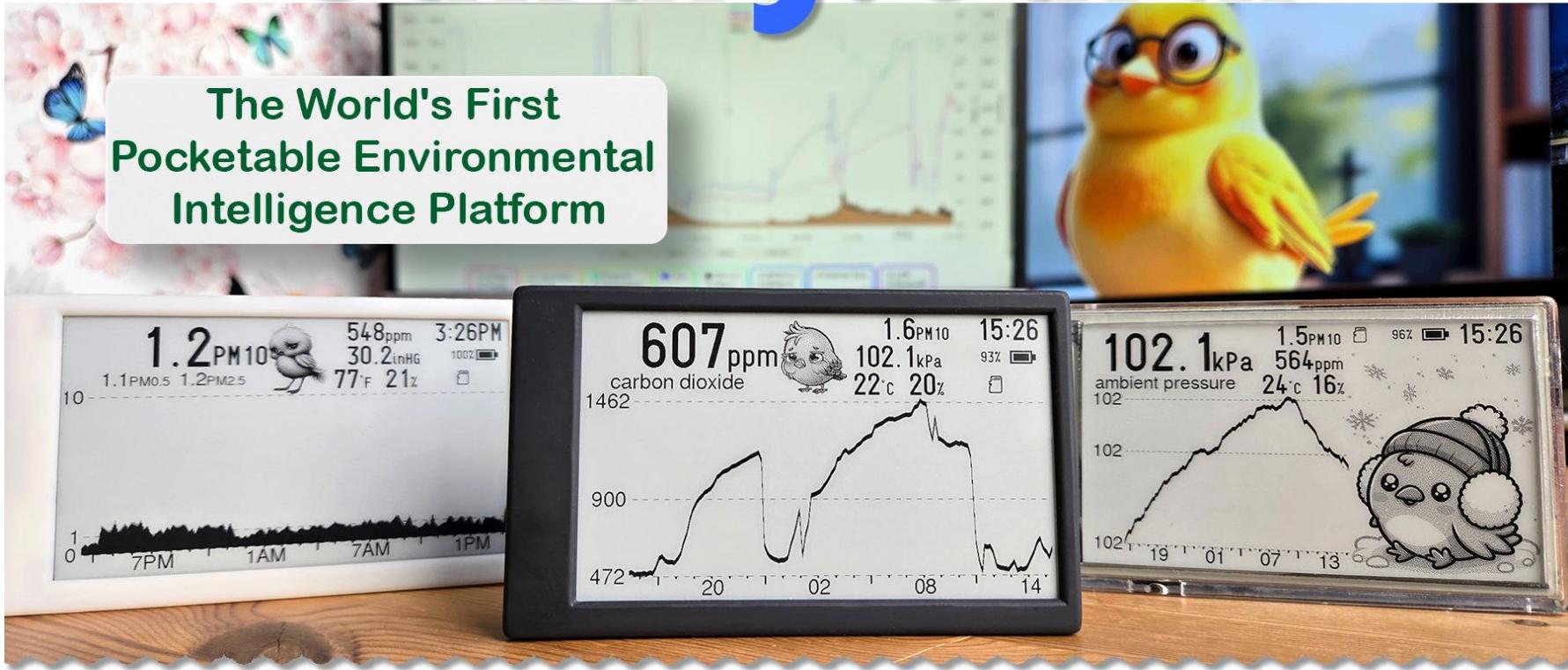


canary.earth



Breathe Easy with Clean Air Monitoring

Stay Safe from Wildfires & Pollution • Focus Better with CO₂ Insights

Sleep Soundly in Optimal Conditions

Protect Your Skin from UV-B • Enjoy a Stylish Clock & Photo Frame

Pitch Deck

by **Breathable Universe Resilient Design**

Prepared December 1st 2025

Constantin Bucataru, Founder

+1-416-819-9539

rooster@canary.earth

<https://pitch.canary.earth>

The Problem - The Invisible Crisis

Cognitive Impairment: CO₂ at 1,400 ppm, common in offices and classrooms, reduces cognitive function by up to 25% ^[1].

Health Threats: Wildfire smoke particles (PM2.5) arrive hours before smell; indoor allergens and pollutants degrade sleep and exacerbate chronic conditions.

Data Blindness: Consumers and institutions lack accessible, accurate, and integrated data to understand or mitigate these threats. We are navigating our environments blind.



July 14th 2025 – Founder's living room, Toronto

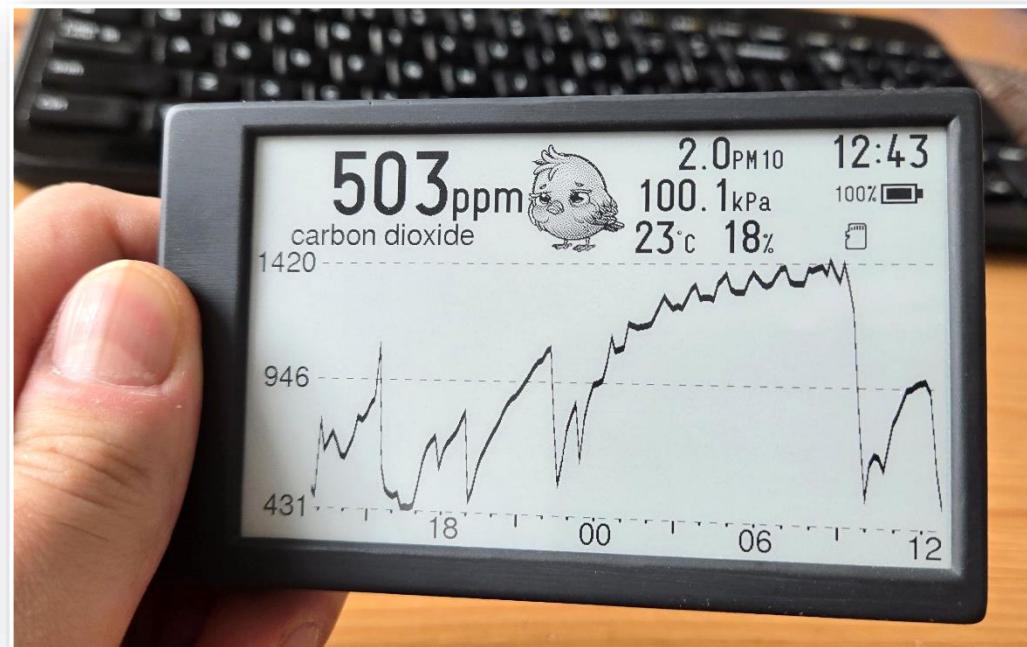
The Canary shows smoke drifting in starting at 5pm and persisting throughout the night.

The Solution - Canary in a Nutshell

A single, pocketable device integrating seven lab-grade environmental sensors.

Actionable Intelligence: Transforms complex data into intuitive graphs and proactive alerts for health, safety, and performance.

Platform, Not a Gadget: Functions independently or collectively, while its data potential powers future enterprise and health ecosystems.



January 15th 2025 – Tester's bedroom, Toronto

The Canary shows a pronounced sleep cycle with peaks and valleys corresponding to a 1.5-hour metabolic rhythm likely caused by difficult digestion.

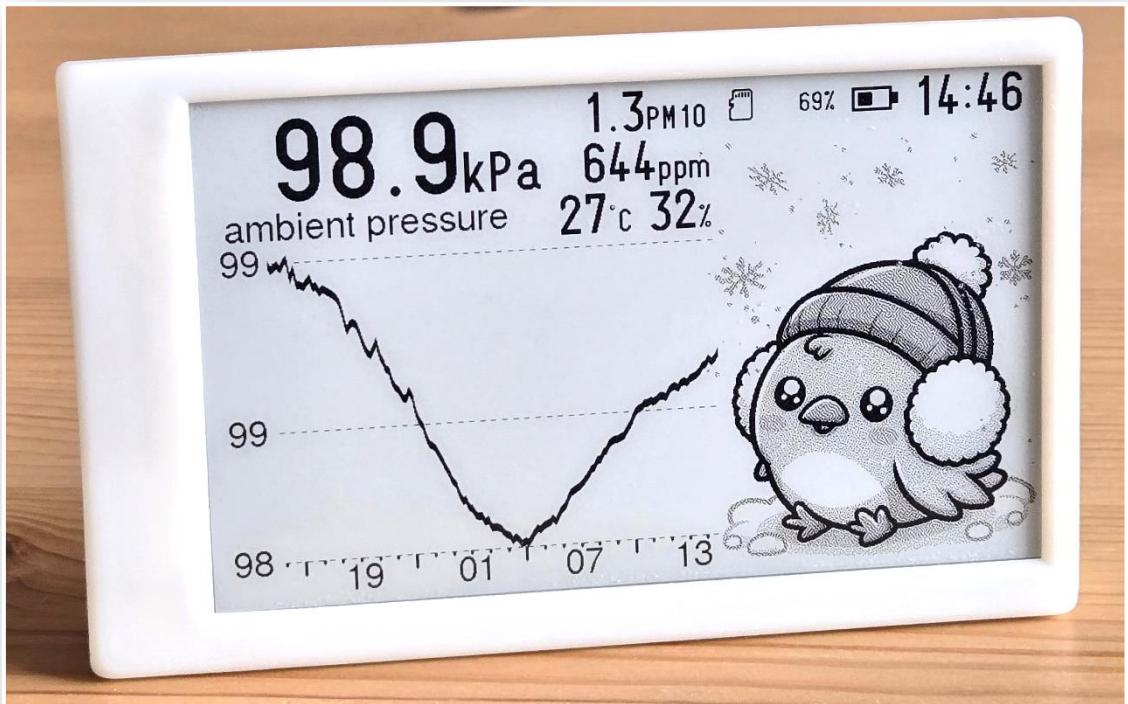
Why Now? - The Perfect Storm

Post-Pandemic Awareness: Heightened focus on indoor air quality and respiratory health.

Climate Escalation: Increasing frequency and intensity of wildfires and extreme weather events [2].

Quantified-Self Movement: Consumers are increasingly data-driven about their personal well-being.

Corporate ESG Mandates: Enterprises require data for HVAC efficiency, employee wellness, and compliance, especially with LEED.



Sudden drops in pressure almost always indicate imminent rain or blizzards. Conversely, rises in pressure signal clear skies.

The Technology - Unmatched Sensor Fusion

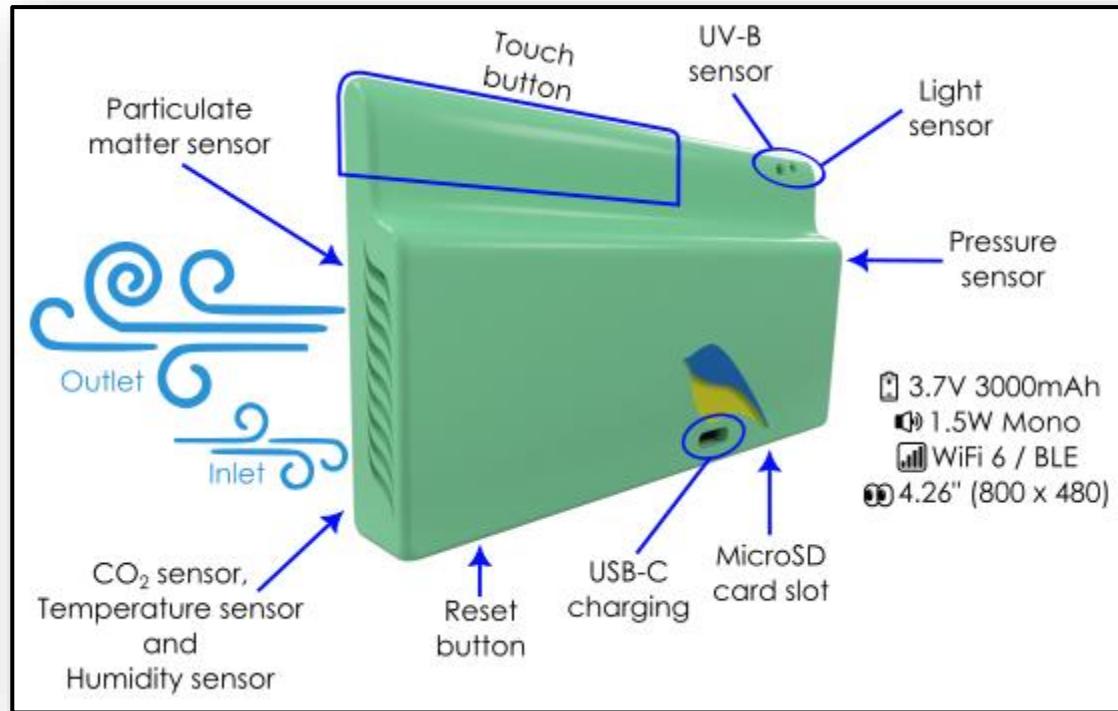
Not Inferred, Measured: We use specialized, best-in-class sensors, unlike competitors who use low-quality jacks-of-all-trades.

Carbon Dioxide (CO₂): Swiss laser-acoustic spectrometer (± 40 ppm accuracy).

Particulate Matter (PM): Dual laser Swiss scatterometer with laminar flow.

UV-B: Industry-first true spectrometer (240-320 nm).

Technical Validation: Internal tests show faster smoke detection than human smell and occupancy detection via CO₂ fluctuations down to a hamster in a bedroom.



A year's worth of ten-minute interval logs is stored on the device with the ability to store a hundred year's worth of one-minute-interval logs on a MicroSD card.

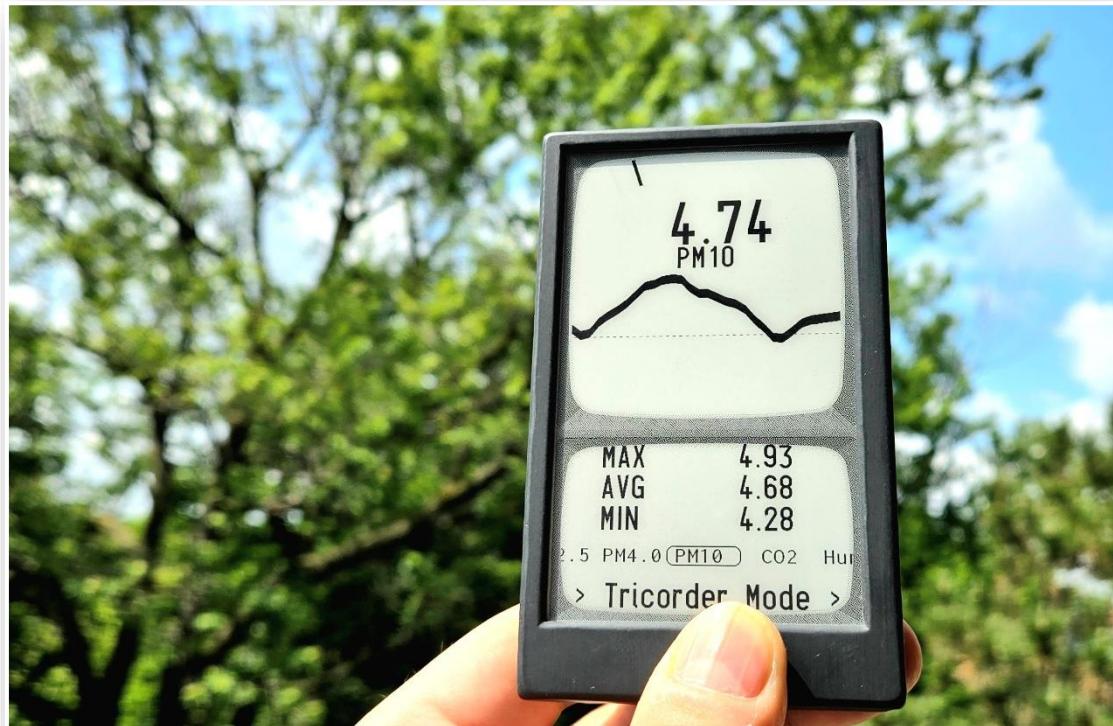
The Product - More Than a Monitor

Core Monitoring: Real-time values and 24-hour on-screen graphs for seven core metrics.

Unique Features:

- ❖ **Scanner Mode:** Triangulate pollutant sources like a scientist.
- ❖ **Mask Test:** Validate the efficacy of protective equipment.
- ❖ **Enterprise Mesh:** Offline, secure building-scale networks via ESPNow®.

Design Philosophy: "Right to Repair" with user-replaceable parts for a 10-year lifespan.



June 10th 2025 – Don Valley Park, Toronto

Slightly higher levels than the typical 0 to 1.0, but well below any cause for concern. Clear skies and happy breathes!

Market Opportunity - An \$8B+ TAM

Total Addressable Market (TAM):

The global air quality monitoring systems market is projected to grow from \$4.5B (2025) to \$7.8B (2032) at a 7.93% CAGR ^[3].

We Target the Key Growth Segments:

- ☛ **Indoor Monitoring (\$2.2B in 2024):** The dominant segment, driven by health and productivity concerns ^[4].

- ☛ **Outdoor Monitoring (\$2.1B in 2024):** Critical for wildfire detection and pollution alerts ^[5].

Serviceable Addressable Market (SAM):

\$2.5B+ (Health-conscious urbanites, parents, schools, enterprises).



Canary is designed to be part of a curriculum. The optional bilingual journal teaches about weather and about all the metrics displayed. It includes template pages for logging to establish life-long associations between environmental factors and personal effects.

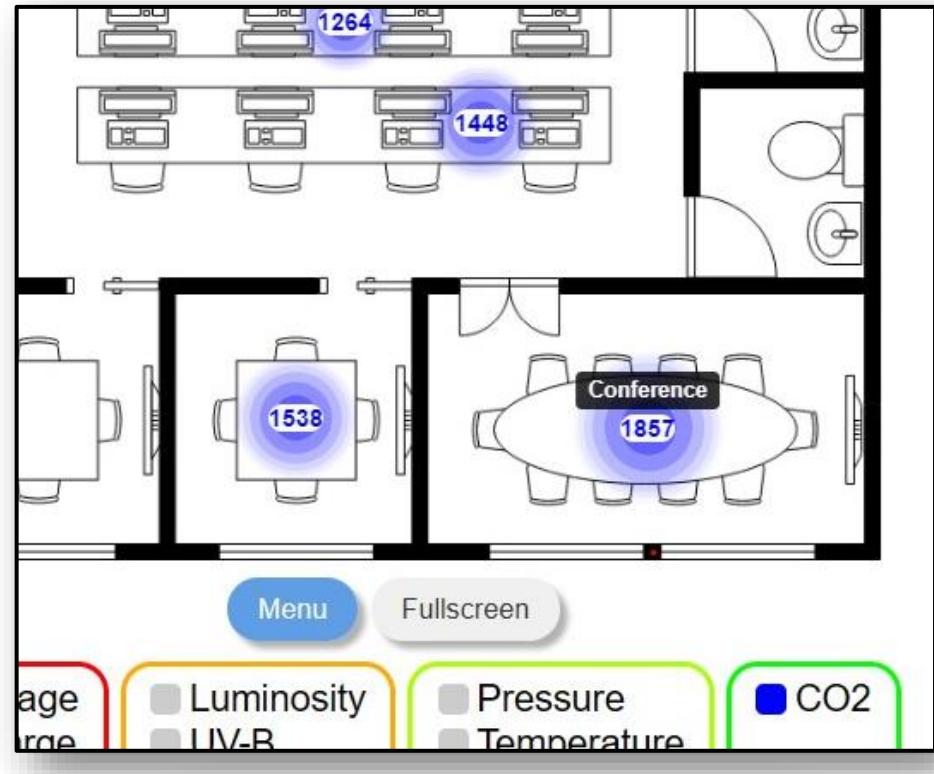
Business Model - Dual-Engine Growth

B2C (Direct): D2C e-commerce via canary.earth. Premium price point (\$249-\$299) with discounts for early adopters.

B2B (Scalable):

- 👉 **Institutions:** Schools (vaping detection, HVAC), Offices (wellness, efficiency).
- 👉 **Enterprises:** Networked solutions for facility management and data services.

Future Revenue Streams: Data API, insurance partnerships, OEM board licensing, web-scraping fees.



As you can deduce, the entire team is crowded in the conference room.

Go-to-Market Strategy

Phase 1 (Launch): Direct online sales, targeted content marketing (science-backed blogs, social proof), and partnerships with health/wellness influencers.

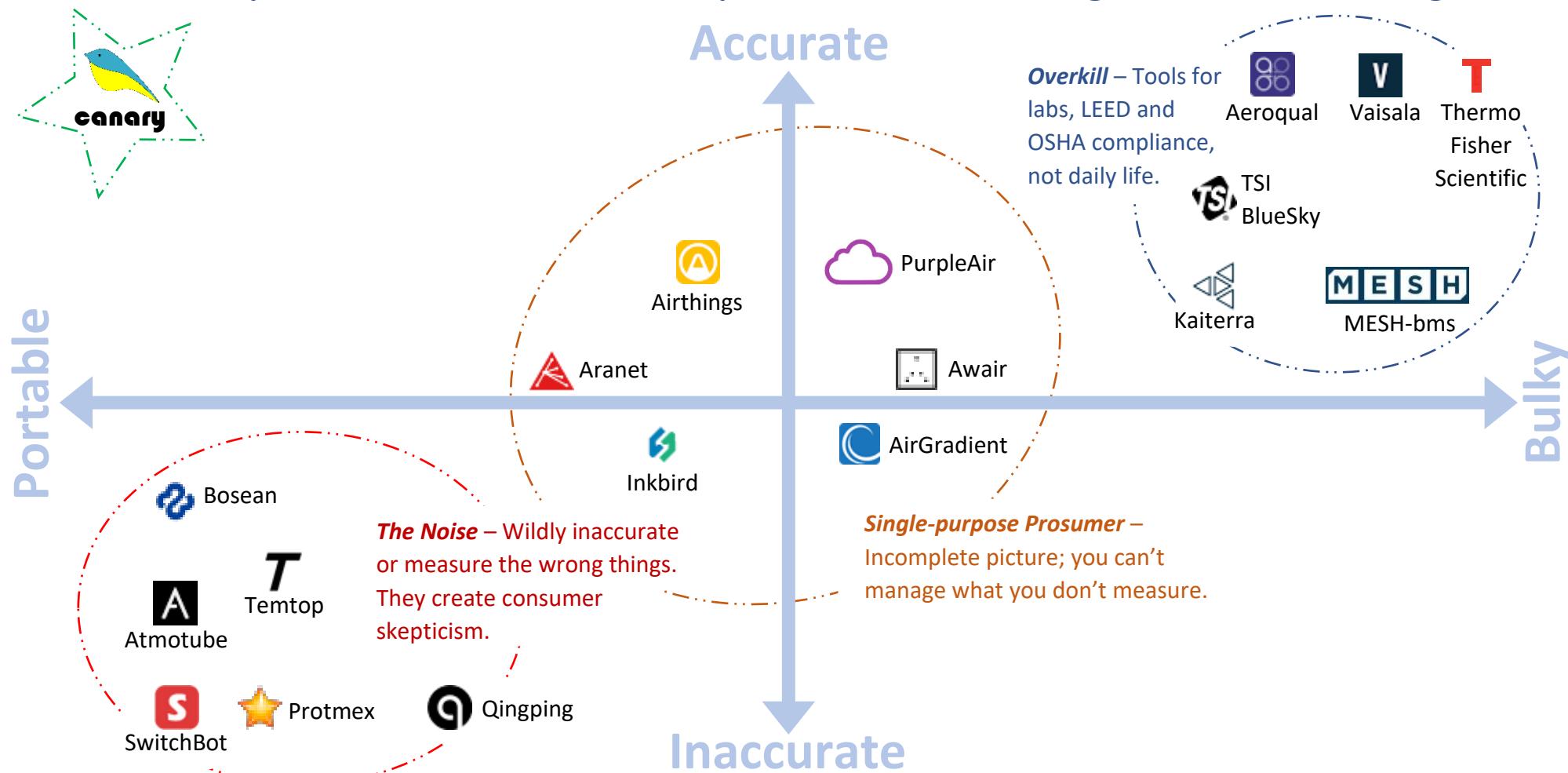
Phase 2 (Scale): Outbound sales to school districts and property management firms. Attend industry trade shows (CES, Facilities Management).

Phase 3 (Ecosystem): Develop partner program for integrators and launch data platform for enterprise clients.



Canary offers unlimited customization and usability so the customer makes it her own, whether sending photos to loved ones, tracking the price of concert tickets or displaying the daily tides. The possibilities are limitless!

Competitive Landscape – Accuracy vs Usability



The Team & The Ask

Constantin Bucataru (Founder):

Finance: Ex-investment banker (M&A) - expertise in scaling, strategy, and unit economics.

Engineering: Single-handedly developed the functional prototype from concept to sensor fusion (TRL7).

Vision: The bridge between complex environmental science and scalable consumer hardware.

The Ask:

Seeking: \$1,000,000 Seed Round.

Allocation:

- ↗ **60%**: Initial production run of 10,000 units.
- ↗ **10%**: Final refinements and key contractor hires (PCB, moulding, graphics, photography).
- ↗ **30%**: Operational runway.



An initial welcome screen guiding the user through the single-button gestures and the settings.

Vision - The Universal Standard

Become the foundational layer for hyperlocal environmental data.

Empower individuals and institutions to prevent >1M pollution-related health incidents annually by 2035.

Enable data-driven decisions for urban planning, climate resilience, and personalized health.



Magnus vs Nepo at the 2021 World Chess Championship was a primary inspiration for the Canary. The fish tank-like venue likely favoured the player less susceptible to elevated CO₂.

All figures previously stated are in US Dollars.

References:

- [1] Fan, Cao et al. "Short-term exposure to indoor carbon dioxide and cognitive task performance: A systematic review and meta-analysis." *Building and Environment* vol. 237 (2023). <https://doi.org/10.1016/j.buildenv.2023.110331>
- [2] IPCC. (2023). Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (Eds.)]. IPCC. <https://doi.org/10.59327/IPCC/AR6-9789291691647>
- [3] Fortune Business Insights. (2025). *Air quality monitoring system market size, share & industry analysis, 2025-2032* (Report Code: FBI-105614). Retrieved from <https://www.fortunebusinessinsights.com/air-quality-monitoring-system-market-105614>
- [4] Fortune Business Insights. (2025). *Indoor air quality monitoring system market size, share & industry analysis, 2025-2032* (Report Code: FBI-113784). Retrieved from <https://www.fortunebusinessinsights.com/indoor-air-quality-monitoring-system-market-113784>
- [5] Fortune Business Insights. (2025). *Outdoor air quality monitoring system market size, share & industry analysis, 2025-2032* (Report Code: FBI-113763). Retrieved from <https://www.fortunebusinessinsights.com/outdoor-air-quality-monitoring-system-market-113763>