Verdance

The future of food production

Burgeon Systems Inc

Founder: Hari Von Wintr

San Francisco, CA

October 2025

Let’s grow together

Agriculture is collapsing under its own weight

Traditional agriculture drains water, emits carbon, and depends on fragile global supply chains, fueling inefficiency and growing food insecurity worldwide.

70%
Freshwater

25%
Emissions

30-40%
Waste

Sources: FAO AQUASTAT 2022; IPCC AR6 2023; UNEP Food Waste Index 2023; WFP Global Food Report 2024.

Indoor farming tried to fix it, but got stuck

Costly to build and run

Difficult to scale

Low-margin produce

Vertical and indoor farms remain challenged by high capital costs, energy demands, and limited scalability, making profitability difficult to achieve." Nature (2025), "The Rise and Fall of Vertical Farming"
【https://www.nature.com/articles/s44383-025-00006-4】

The future of agriculture isn’t burning down more forests or growing more lettuce in a warehouse.

It’s making every home capable of growing their own food

Introducing Verdance

The world's fully autonomous aeroponic system right in your living room

Intelligent, Modular and Growing

Fully enclosed design
powered by NVIDIA Jetson Orin™
powering our proprietary
Verdyx AI Engine

Gantry-mounted camera for
computer vision

Modular shelves with full
spectrum LED grow lights

High-pressure & Low-pressure
actuators for precision misting

Controlled airflow for
climate modeling

Smart reservoir and full sensor array
for autonomous growing

Data isn’t a byproduct, it’s our moat.

Every cycle creates unique growth data, unlocking efficiency gains and a foundation for future industrial applications. Users can opt to share their data to continually improve Verdyx, or remain offline through localized learning.

Verdance remains online, even when servers go down

Verdyx continuously learns from every Verdance unit locally, adapting to each user's environment and preferences. Verdyx utilizes a powerful digital twin model that forecasts and simulates outcomes, enabling it to adjust conditions before the change even occurs.

Adaptive Learning

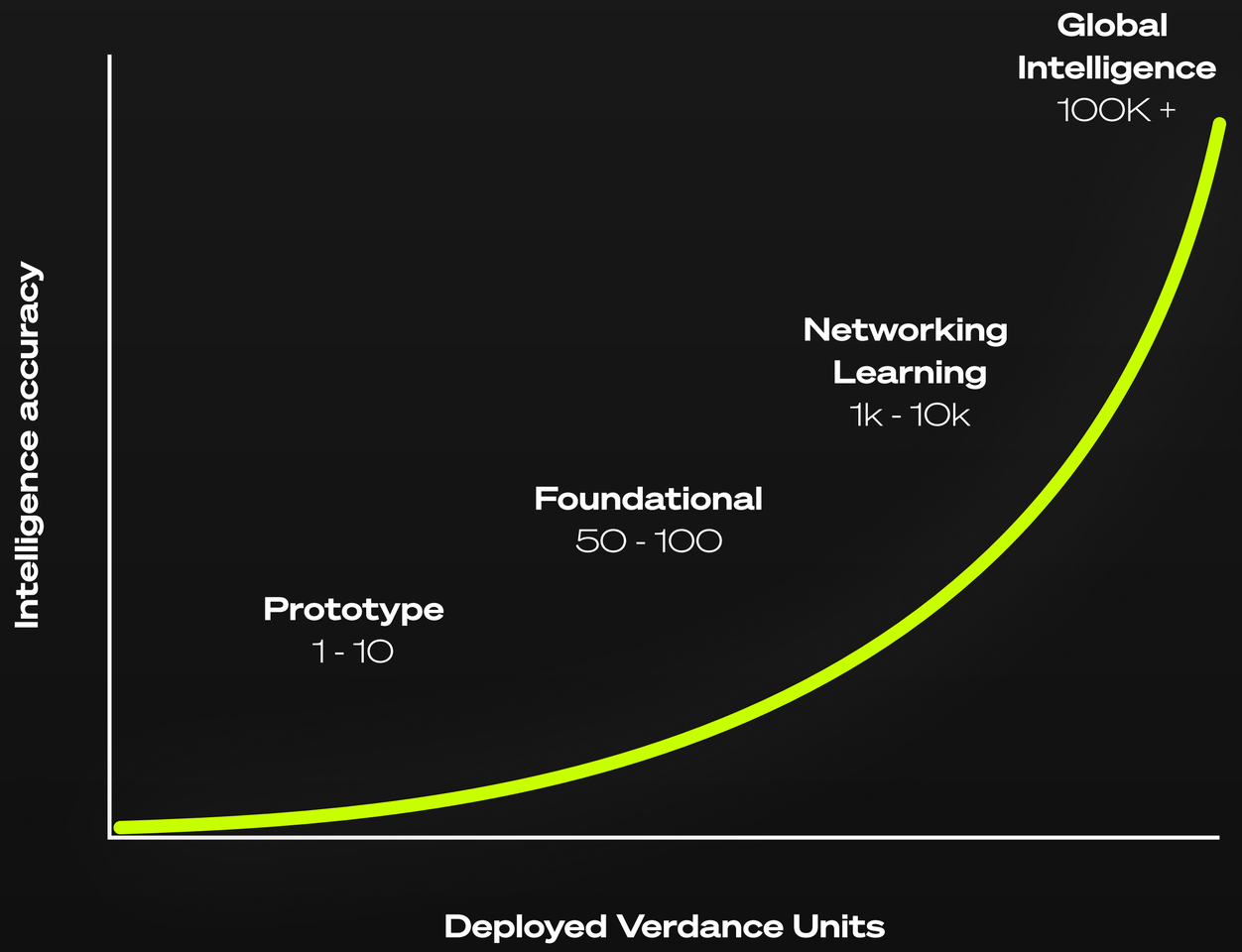
Meta-Learning

Predictive Growth

Based on NVIDIA Jetson edge inference benchmarks and distributed-learning efficiency models (Stanford DAWN 2022; NVIDIA Developer Docs).

Verdyx gets smarter with every unit deployed

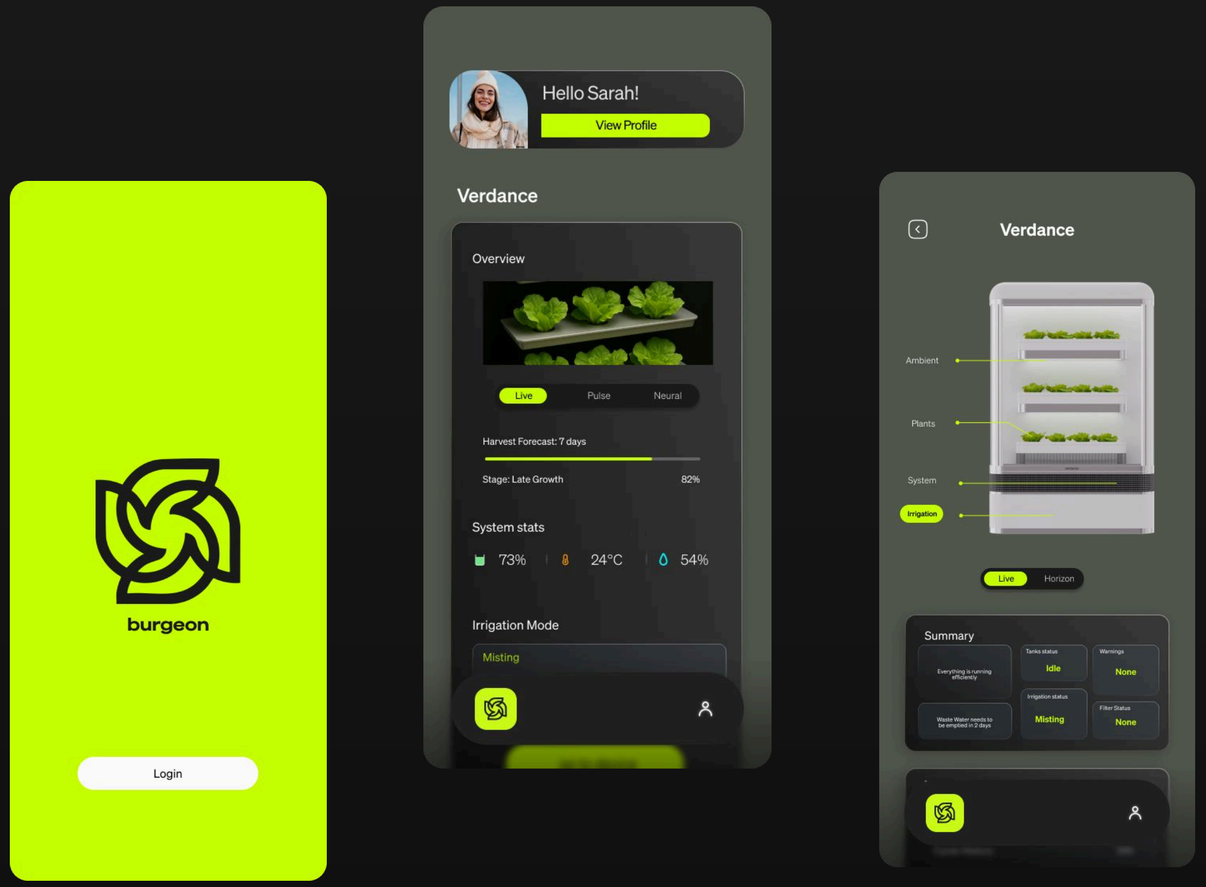
Every Verdance unit contributes to the collective intelligence of the Verdyx network, accelerating learning and optimization globally.



Based on NVIDIA Jetson edge inference benchmarks and distributed-learning efficiency models (Stanford DAWN 2022; NVIDIA Developer Docs).

Learn together with Burgeon

Users gain powerful insights through the Burgeon app.
Monitor growth in real time, personalize how you grow, and relive your harvests through timelapses journal entries.



The result of 1 million Verdance systems working in harmony

Impact at SCALE

Verdance decentralizes food production
eliminating carbon miles, saving water, and removing millions of tons of plastic waste every year

Carbon Miles Eliminated

50,000 CO_2e / year

1 million units

Real-World Equivalent

350 billion km of travel,
or 8 million laps around Earth

Water Saved

4,75 billion L / year

1 million units

Real-World Equivalent

1 900 Olympic swimming pools

Plastic Waste Avoided

5,000 tons / year

1 million units

Real-World Equivalent

The annual plastic output of
20 million grocery clamshells

Sources: FAO (2022); Nature Food (2022); USDA ERS (2023); NASA/Cornell CEA Study (2018); University of Arizona CEA Center (2020); FAO AQUASTAT (2023); WRAP UK (2021).
Assumptions: 50 kg produce/unit year; 95 % water-efficiency vs. traditional; 50 kg CO_2e saved per unit via localized growth; 2.5 kg plastic packaging offset per unit.

Urban self-sufficiency

When every home becomes a source of nourishment,
cities can feed themselves

One Apartment Block in San Francisco
100 units

4-6 tons

Fresh produce P.A

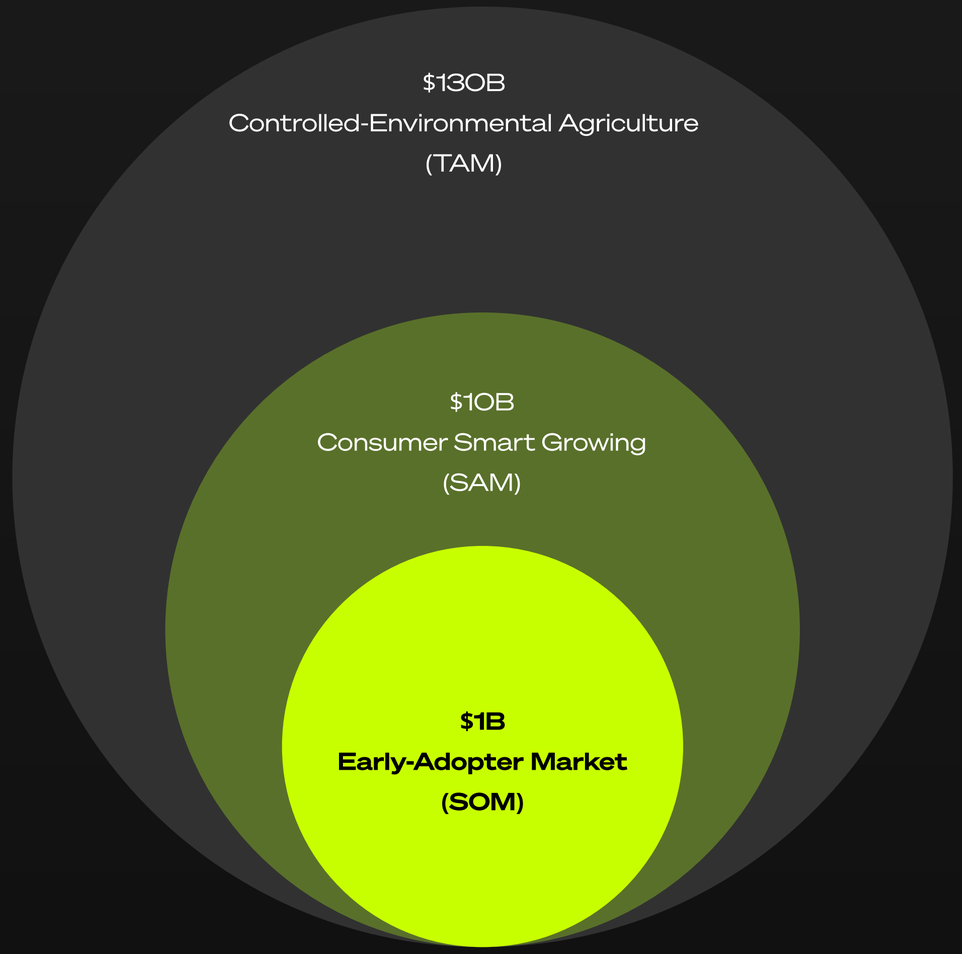
10% Adoption Across San Francisco
40k units

2M+ kg

Fresh produce P.A

A $4.7T global market waiting for its Dyson moment

Agriculture is a $4.7 trillion global industry yet less than 1% of it is automated. Verdance enters in the $130B controlled-environment sector, bringing intelligent automation to the consumer level, and scaling toward a fully decentralized agricultural future



Sources: FAO Statistical Database (FAOSTAT 2023); USDA ERS "Controlled Environment Agriculture Trends 2024";
OECD Agricultural Outlook 2023-2032; Euromonitor 2023 Home Hydroponics Report; Technology Adoption Curve Model (Rogers, 2003).

Verdance's Near-Term Opportunity

- **Consumer Smart Growing Systems ($10B SAM)**
  Growing 20% YoY as sustainability and home automation merge.
- **Premium Segment >$2,000 devices**
  Dominated by clunky hydroponic systems, no AI, no autonomy. Verdance owns the "Dyson-tier" gap.
- **Data & AI Layer (Verdyx Engine)**
  Enables digital twins and predictive agriculture — unlocking future SaaS revenue from analytics and optimization.
- **Hardware-as-a-Service Model**
  Monthly pods and nutrient plans = recurring revenue + hardware margins.

Each layer compounds Verdance's defensibility from product to platform to recurring ecosystem.

Different lives, same desire

Verdance adapts to every stage of life, always intelligent, always effortless.

The Young Bachelor

Mindset: **Modern minimalist**
Motivation: **Tech, design & lifestyle status & health**

- 25-35 single, urban apartment dweller
- spends on premium home tech and automation
- values efficiency and aesthetic integration

Why Verdance appeals:

A statement piece that complements his home and his identity, clean, intelligent, and self-sustaining.
He doesn't garden he optimizes growth.

The Modern Mom

Mindset: **Conscious caretaker.**
Motivation: **Health, purity, and education.**

- 30–45, health-obsessed, mid-to-high income family household.
- Buys organic produce, but worries about pesticides and food waste.
- Teaches sustainability at home.

Why Verdance appeals:

Empowers her family to eat better, understand food, and live consciously, with no effort or mess.
She doesn't just grow plants, she grows wellbeing.

The Retiree

Mindset: **Independent and nostalgic.**
Motivation: **Connection, simplicity, and comfort.**

- 60–75, retired, downsized from a family home.
- Loves gardening but can no longer manage it physically.
- Values fresh produce, routine, and serenity.

Why Verdance appeals:

Rekindles the joy of growing without lifting a finger.
Verdance's automation gives back a sense of purpose and control.
He doesn't maintain a garden, he reclaims one.

The market splits on two axis: Intelligence and Centralization

	Centralized	Decentralized
Static	Traditional agriculture	Consumer grow devices
Intelligent	Vertical Farming	Verdance

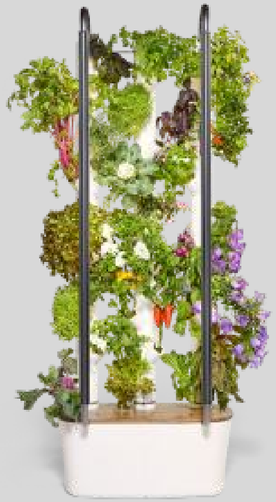
Verdance is the only decentralized, self-learning system.

Our competitors just grow plants, we also grow intelligence

	Countertop	Prosumer Tower	Vertical Farms	Verdance
Autonomy	Timer	Semi- Auto	Semi- Auto	Closed-loop autonomy
Learning	None	Limited	Central Ops / ML	Self-learning (Verdyx)
Intelligence layer	None	None	Central Command	Adaptive intelligence (local + cloud)
Crop Range	Herbs / Greens	Greens	Lettuce / Greens	Modular, broad (herbs to fruits)
Data & Insights	Minimal	Limited	Centralized Ops data	Full lifecycle, predictive forecasts
Form & Install	Countertop Gadget	Prosumer Tower	Warehouse	Modular Shelving + Aeroponics
Business Model	Pods + Hardware	Pods, Hardware, Sub	Produce sales	Hardware + AI + modular ecosystem
Price	$$	$$ - $$$$$	$$$$$	$$$

Verdance is generations ahead

While competitors use water-based hydroponics that waste resources and require constant manual input,
Verdance uses AI-powered aeroponics, misting roots with nutrient-rich vapor for faster growth, higher yield, and 95% less water.
It's not just smart gardening, it's autonomous cultivation.



Gardyn
Home

Smart Hydroponics

$899

Rise Garden
Rise Garden 3

Hydroponic grow shelves

$899

Click And Grow
The Wall Farm

Hydroponic grow shelves

$2799

Burgeon
Verdance

Autonomous Aeroponics

$2999

Growing value beyond our hardware

Each Verdance sold powers data, intelligence, and recurring growth.

Hardware

Verdance units

$3000

Subscriptions

Burgeon app, nutrient pods, premium data insights

$20/m

Verdyx Data Licensing

Predictive models for industrial applications

Growing value beyond our hardware

Hardware drives initial revenue; software and AI subscriptions compound long-term growth.

Year 1

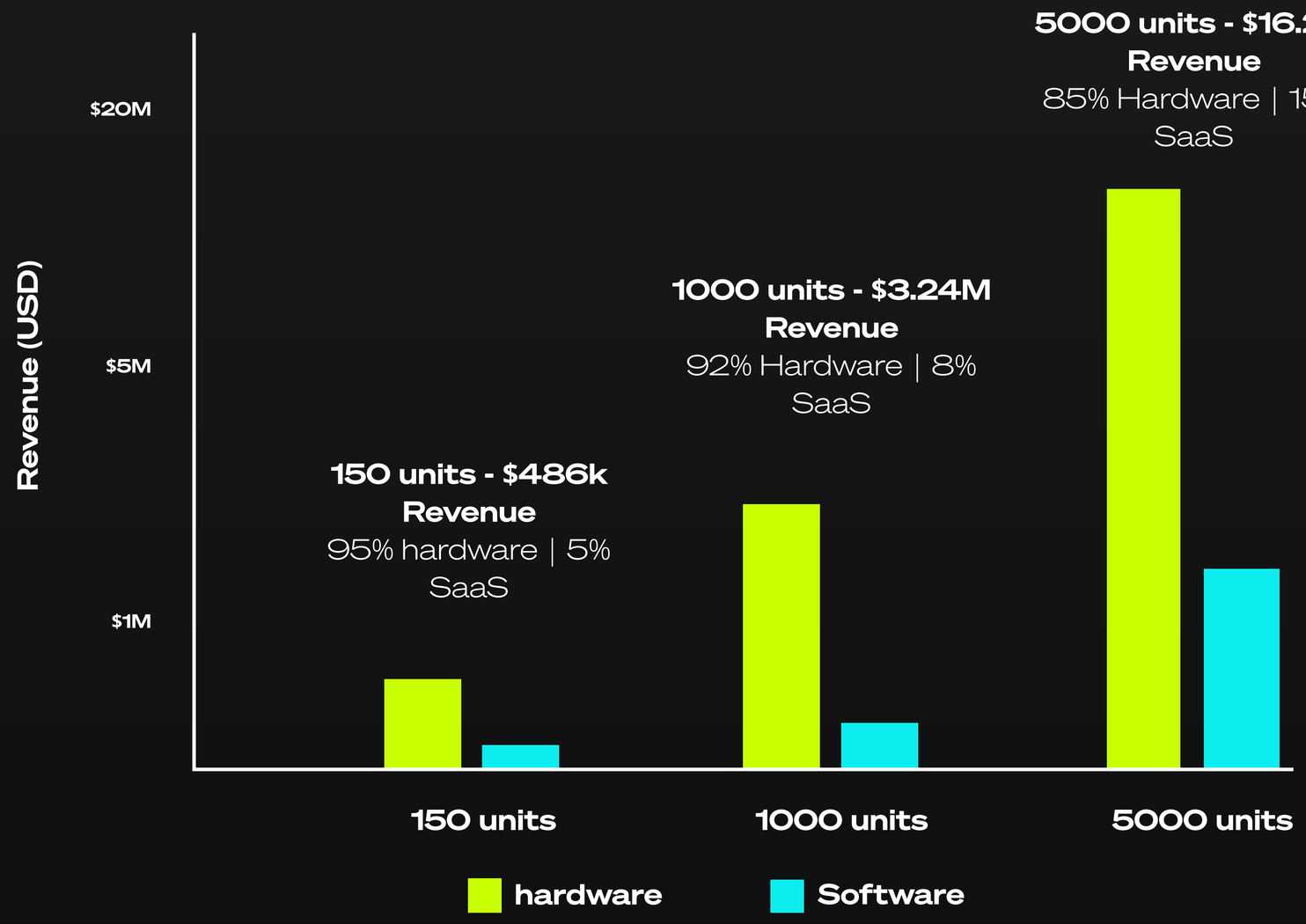
Pilot Validation

Year 2

Early scale + subscription onboarding

Year 3

Hardware margins improve + SaaS layer grows



From vision to reality

Each Verdance sold powers data, intelligence, and recurring growth.

Hardware development

High-Margin Modular Units

Prototype v1 built, 3D renders, component sourcing complete

80%

Software & AI

Verdyx Engine + Burgeon App

Cloud backend in development, MVP UI ready

70%

Brand & Market Readiness

Fully developed identity

Early investor + pilot interest confirmed

60%

Intellectual Property

core systems patent

Provisional patent filed for Verdance + Verdyx

70%

The team building verdance

Hari Von Wintr

Founder, CEO & Head of Engineering

Design | Systems Thinking | Engineering

Diane Wagner

Head of AI

Machine Learning | AutoML | Digital Twins

Ian Bartels

Climate Engineer & R&D Lead

Environmental Engineering | Sustainable Systems

Susanne Sütterlin

Botanical researcher

Forest Sciences | Landscape Ecology | Data Analysis

Drew Moodley

3D Visualization Designer

Visualization | Industrial Design

Fabio De Odorico

Mechatronics Engineer

Prototyping | Precision Fabrication | Systems Integration

7 years of relentless evolution

from DIY experiments to a fully autonomous agricultural platform

Exploration › **Foundation** › **Insight** › **Acceleration** › **Execution** › **Beyond**

Builds first smart reservoir prototype, discovers the untapped potential of sensor-driven growing and a market gap for IoT Agtech devices.

Prototype dismissed as “useless tech,” explores alternate SaaS models to try pursue funding.

Sees South African produce in Paris, realizes centralization is the true problem.

Concept of making every home a vertical farm through beautifully designed consumer electronics

Verdyx VO built.
3D Visualizations of product finalized

2018-2021

First attempt at a vertical farm, realizes high cost and impracticality.

Used small Hydroponic grow kit, realized the process was overly manual, fragmented and off the shelf solutions were expensive, industrial and inefficient

2022

Company founded to explore building a full scale vertical farm and pitch the “smart reservoir” as our key differentiator.

CEA 2021 Annual Report stated that big players in agtech didn’t track sustainability metrics. This alluded to data not being tracked.

2023

Builds early farm-to-consumer app; low traction & no interest confirms hardware focus.

2024

Meets Diane; pivots toward consumer automation and enclosed design.

2025

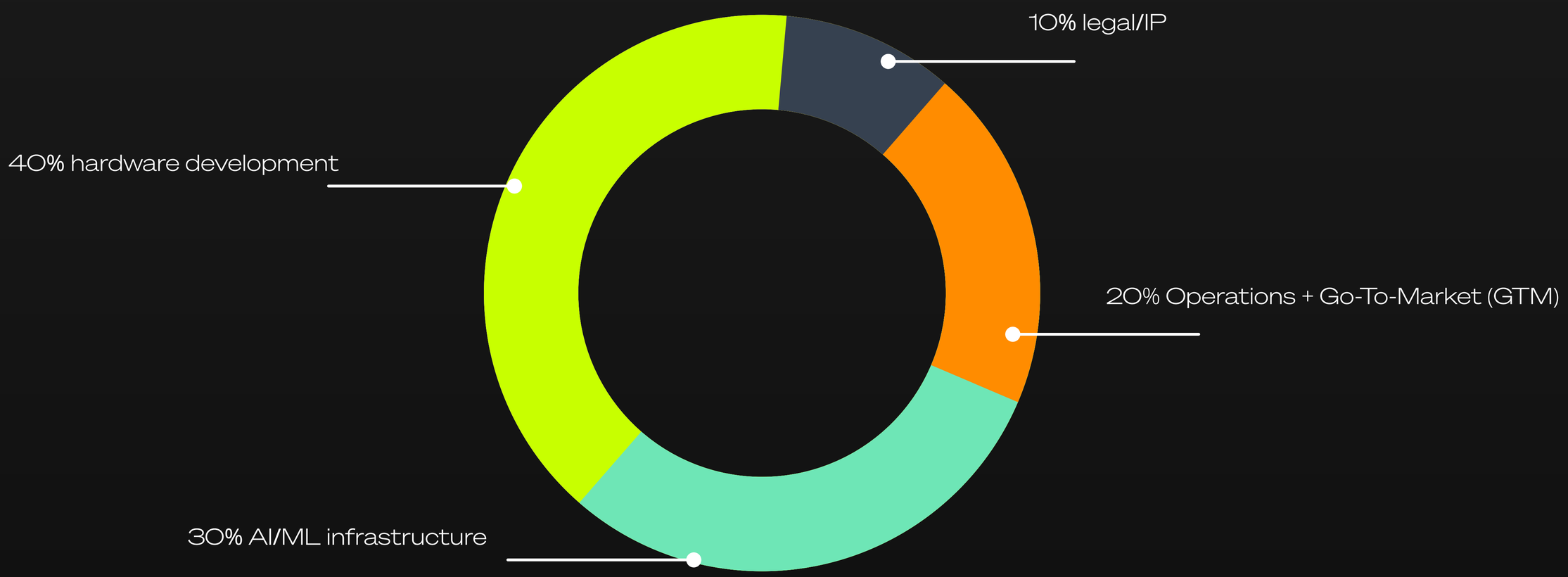
Team Founded
Researches digital twins, develops Verdyx AI and Verdance hardware stack.

2026

Hardware finalized, manufacturing pipeline locked; pilot production ready.

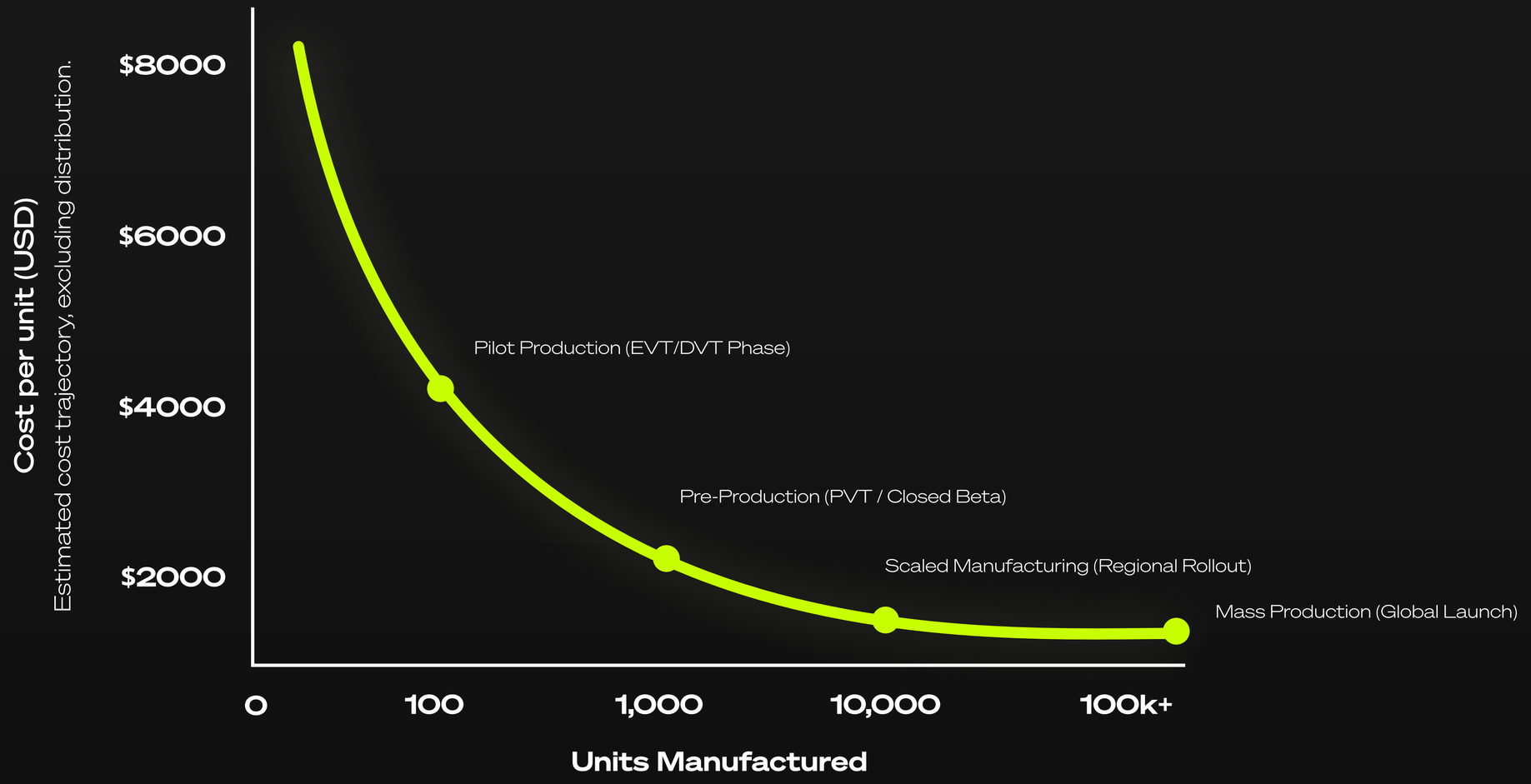
What we need

$2M seed round to finalize Verdance, and launch pilot fleet



Manufacturing Efficiency Improves With Scale

Each production cycle drives material optimization, supplier leverage, and automation efficiency reducing cost per unit over time.



Based on internal manufacturing projections and standard learning-curve models (90–95% yield rate).
This signals quantitative discipline without disclosing proprietary data.

From Pilot to Consumer Launch

Every unit sold powers the next phase,
starting a global movement of decentralized agriculture

Pilot

100 units

Build hype, collect feedback, refine UX, and validate pricing.

Limited Launch

1,000 units

Target early adopters, influencers, and high-income sustainability circles in California.

Consumer Rollout

10,000 units +

Global expansion, retail partnerships, and ongoing subscription growth.

Verdance is just the beginning

We're building an intelligent ecosystem that extends beyond the home, redefining how fresh food is grown in a connected world.


burgeon