



grownetics®

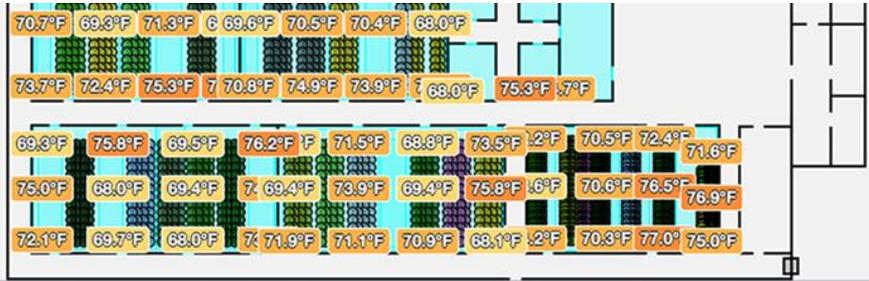
Powering the Next Generation of Smart Farms

Fully integrated, hyper-efficient, fully automated

Overview

Today's cultivators are faced with an ever changing climate in their farms and in their businesses. In Colorado alone, we've seen nearly half of first generation licensed cannabis cultivators go out of business or get acquired due to their inability to operate efficiently. Meanwhile an international market is quickly blossoming with strict Good Agricultural Practices (GAP) and Good Manufacturing Practices (GMP) as the new norm. The Grownetics cultivation platform is currently operating some of the most advanced pharmaceutical cultivation facilities in the world and quickly becoming the go-to farm management suite for some of the largest cultivators in North America.

Grownetics is leading the digital transformation of indoor agriculture.



The Problems

1

Lack of Data

Most farms are still managed with pen and paper or a handful of inconsistent tools. Those that have data rarely make use of it beyond monitoring.

2

Lack of Automation

Most indoor cultivations and greenhouse farms are still highly manual which accounts for high labor costs, inconsistency, and vector for disease.

3

Lack of Analytics

Manufacturing businesses are used to ERP tools, MRP tools, and data around production. Due to its organic nature farming has lagged behind.

4

Lack of Skilled Labor

Controlled Environment Agriculture is a new industry with very few trained horticulturalists having experience working with these systems.

The Solution

Grownetics Enterprise Cultivation Suite (ECS)

Features:

- + Realtime 3D Microclimate Map
- + Integrates with Any Sensor
- + Individual Plant Tracking
- + Individual Plant Analytics
- + Multi Site Management
- + Crop Logistics & SOP Management
- + Variety Specific Cultivation Recipes
- + AI Powered Recommendation Engine

Grownetics Next Gen Smart Farm Platform

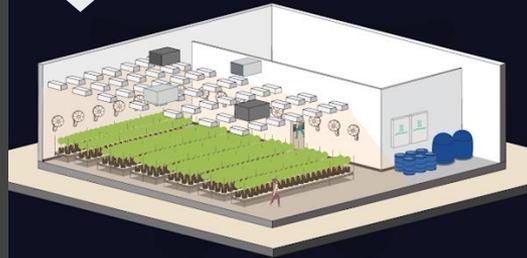


Future Proof Open Platform

Our open middleware layer acts like a universal translator for any sensor and any control system on the market.

Fully Integrated & Automated

By combining all aspects of controlled environment farming into one platform farmers gain maximum efficiency and unparalleled operational insight.



AI Recommendation Engine

Optimum yield recommendations after a single harvest. We've developed the world's first deep learning optimization engine for indoor agriculture.

Grownetics Videos & Media



Grownetics Intro

Click the image above to watch a quick 5 min introduction.

<https://youtu.be/r4M340la7dU>



360 Site Tour

Short video shot in 360 for VR viewing. Click and drag the video to pan around this grownetics powered cultivation facility.

<https://youtu.be/ZRL0vuy5aSQ>



Software Demo

In depth demo on crop data correlation & individual plant tracking

[Video Link](#)

[Click Here For the Cannainsider Interview with CEO and Co-Founder Vince Harkiewicz](#)

Grownetics Integrations

The Smart Farming Market Leader

The central need in the smart farming market is to integrate the 5 components listed below. The Grownetics cultivation system is the only platform to combine them all, leading to maximum efficiency gains as proven in our University Colorado Boulder study ([link](#)).

- 1 | Sensor Manufacturers (big data but no context)
- 2 | Greenhouse Controls Manufacturers (outdated industrial controls)
- 3 | HVAC/Building Automation Vendors (little knowledge of cultivation)
- 4 | Seed to Sale Compliance Software (barcoding and point of sale only)
- 5 | BioInformatics Software (gene tracking & plant research software)



**Grownetics Smart Farms are already
in CA, CO, and MA.**

1.3M Sqft of New Projects in 2020

3 Case Studies to Follow

Case Study 1: Fleurish Farms, CA

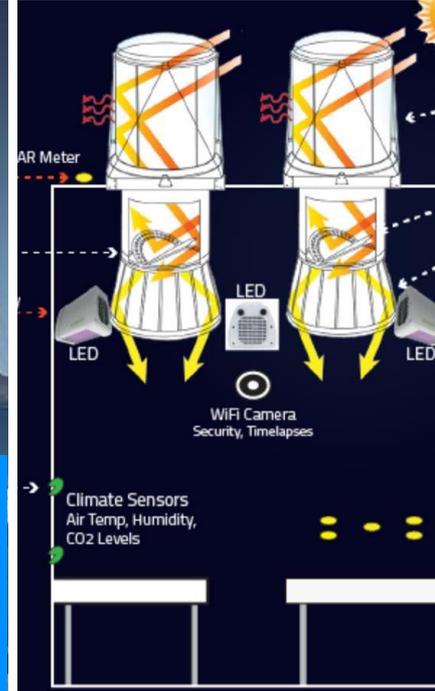
Hyper Efficient Indoor Cultivation with Supplemental Sunlight:

By bringing the sun inside and keeping the heat out we are able to drastically cut lighting and HVAC costs, all while giving the plants what they love, sunlight.



VIDEO

Click the image above to watch a short video on the project.



Case Study 2: Shift Cannabis, CO

Grownetics is the digital backbone of Dalwhinnie Farms by Shift Cannabis and a key tool for multi-facility management.

Next Generation Smart Farming:

We worked with Shift Cannabis to develop one of the most advanced and efficient pharmaceutical R&D cultivation facilities in the world. Grownetics provides full facility micro climate monitoring & controls as well as automated crop data correlation and workflow automation.



Case Study 3: Crops For Health, CO

Crops for Health is a state of the art hemp research facility. Grownetics is working with CFH to deploy next gen sensing & automation solutions around all aspects of plant science.

Custom Research Monitoring & Control Solutions:

Grownetics saves researchers many hours a week with our automated data correlation for every plant grown. This allows botanists and agronomists to focus on what they love, plant science.



Customer Acquisition Channels



Organic Growth

We've acquired our projects with little advertising and most of our leads find us through organic search and discovery.

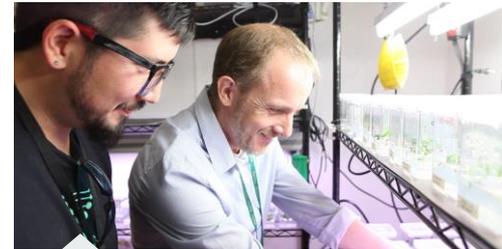
Direct Sales

Our direct sales strategy has proven very effective with public speaking engagements and trade shows driving brand exposure.



Channel Partners

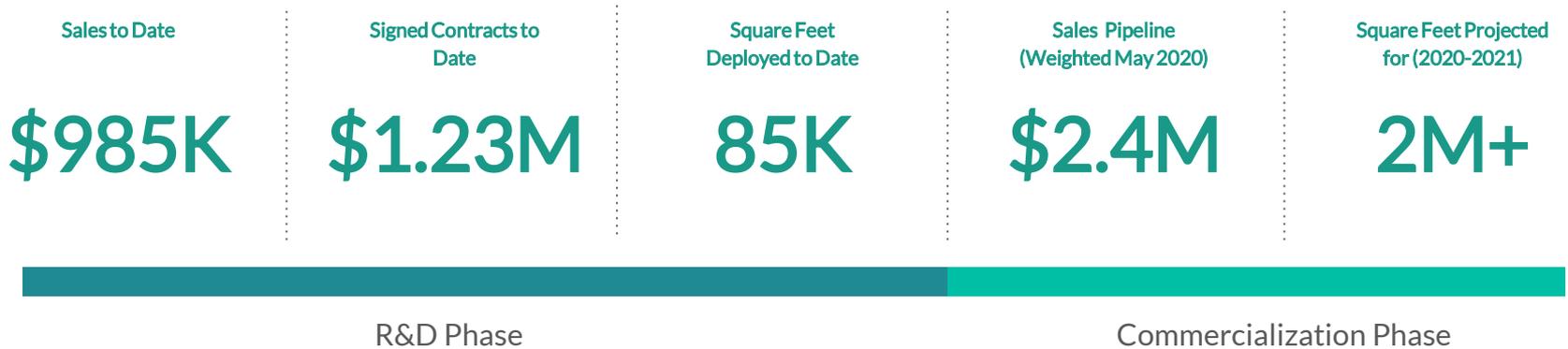
Our channel partners strategy is paying off with 10% of projects in 2019 coming from channel partners.



Project Pipeline

R&D to Commercialization

Grownetics is regarded as the most advanced cultivation platform in the industry and word is getting out on our turnkey smart farms. 2020 is a landmark year for Grownetics with over \$2.3m in the pipeline.



Team

We're a multicultural team of cultivators and engineers that pride ourselves in attracting uniquely talented experts in their field to support us in our mission to bring agriculture into the 21st Century.

We will be adding a COO and Sales Director as part of our seed round.



Board & Advisors



Larry Schnurmacher,
Board Member
Phyto Partners LP

James Ott
Advisor
Previously International
Mgmt at Syngenta



Jonathan Eisenberg,
Chairman of the Board
Tress Capital

George Deriso
Advisor
Head of Entrepreneurship
University of Colorado
Boulder



Patrick Rea,
Board Member
CEO Canopy Boulder

Travis Howard,
Advisor
President Shift Cannabis

Grownetics Vision 2025

Turnkey Smart Farms Deployment

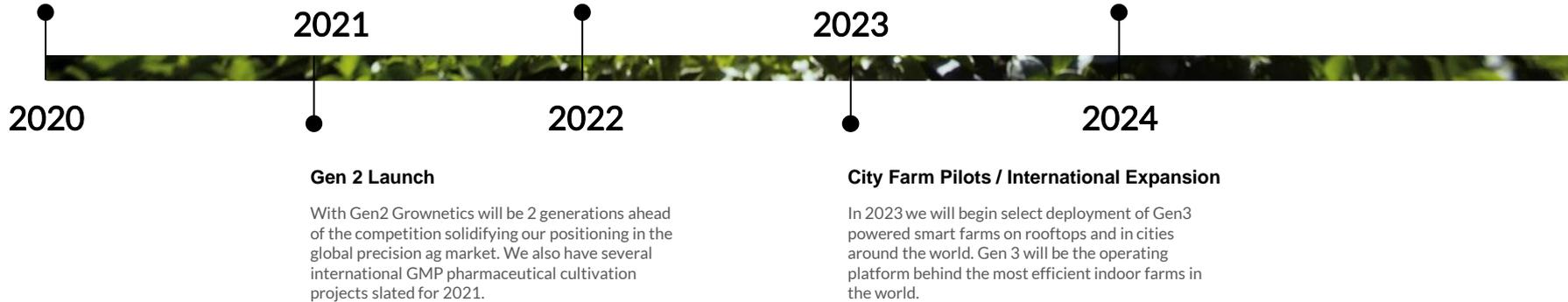
In 2020 Grownetics is slated to deploy in several next-gen pharmaceutical & research cultivation facilities. We're also finalizing development of our Gen2 cloud software & hardware platform

Fully Automated Farming Systems

2022 will mark the maturing of Gen3 development, and a focus on internationalization and global markets.

Global Smart Farm Expansion

2024 will be official launch year of the Gen3 smart farm OS. Gen3 will be scalable from rooftop to multi-acre farms.



Once in a Generation Opportunity

Indoor agriculture and urban farming companies are starting to see rapid growth with the US now investing heavily in next gen farming solutions. Most notably SoftBank Vision Fund, the huge tech-investment vehicle helmed by Japanese billionaire Masayoshi Son, has led a \$200 million investment into indoor farming startup [Plenty.ag](https://www.plenty.ag), other investors were Eric Schmidt (Google/Innovation Endeavours), and Jeff Bezos (Bezos Expeditions).

Grownetics is already being approached by the United Nations FAO, USDA, and international farming companies to support urban ag endeavours and food security projects worldwide.



Awards & Recognition



Grownetics & Fleurish Farms
Prove 90% Higher Efficiency
Indoor Cultivation
*Grownetics Efficiency Study
([link](#))



University
of Colorado
Boulder

Winner New Venture
Challenge, Best
Technology Startup 2016



Next Gen Cultivation
Platform at 30,000
Sqft, more Shift sites
coming in 2019



The Cannabist Awards,
Best Cannabis Tech
Startup 2016

Customer Testimonial: Twin Peaks Cannabis, CO

We've had the pleasure of working with the Grownetics team for many months now and have found their advice and depth of knowledge in controlled environment growing to be really top notch. Their recommended upgrades to our existing greenhouse have been spot on and budget friendly. We'll be implementing Grownetics' state of the art turnkey greenhouse systems for all our new sites.

The entire team is comprised of first class individuals and professionals working tirelessly to help us improve the quality and consistency of our products. I highly recommend Grownetics for anyone interested in improving their cultivation operations and maximizing yields.

- Paul Quinn, President Twin Peaks Cannabis

Funding

Pre-Seed Funding

To Date

\$1.3M

Mainly Notes @ \$5.5M
Conversion Cap



Seed Equity

Now

\$1.1M

@ \$5.5M Pre-Money
Valuation

Led by:
Phyto Partners & Tress
Capital

Angel Investments from:
Dan Caruso, FG Investments
(Brad Feld, Jason Mendelson,
Ryan McIntyre, Seth Levine)
& others

Thank you.

For more information please contact:

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