growin

Produce more with less

KNOW MORE = GROW MORE

Agriculture 4.0: Leveraging big data and autonomous robots to Disrupt Crop Cultivation

MISSION STATEMENT

GROW TO SPEC
produce precise and repeatable uniform phenotypes (taste, color, texture, …)

GROW MORE WITH LESS
minimal environmental footprint & efficient use of resources produce protocols for high yield and long shelf life

THE TEAM

MENACHEM KOP

Co-Founder and CEO

Retired major from the Israeli Intelligence Corps. Successful serial entrepreneur with over 30 years of experience developing global businesses and operations in the areas of Telecom, HLS, Intelligence and Cyber sectors.

DAVID ASSOUS

Co-Founder and CTIO

Retired lieutenant colonel from the Israeli Intelligence Force with 30 years of R&D. Founding member and, former chairman of Israel Electric Authority.

GIGI LEVY-WEISS

Advisory Board

Founding partner of NFX Guild and one of Israel top angel investors with over 10 years' experience as an entrepreneur and CEO of several fast-growth Israeli tech companies and a former pilot with the Israeli Air Force.

PROF. ODED MAIMON

Advisory Board

World leading Data Mining, Big Data algorithm and robotics expert in theory and in practice. Professor and former Chairman of the Faculty of Engineering, industrial engineering department at Tel-Aviv University and former professor at MIT.

THE TEAM

TONY LEVI

MASTER GROWER

Expert in Cannabis genetics & science, with 14 years of extensive experience in international Cannabis projects management.

OREN RABINA

COO

Oversee Cellular operations in Brazil for 8 years ensuring synchronized pursuit of corporate objectives while also guiding branch managers to accomplish goals of their offices.

DIKLA COHEN

CHIEF AGRONOMIST

MSc from the Hebrew University Faculty of Agricultural. Five years cultivating medical cannabis, managing the entire growth process including vegetative reproduction, planting, harvesting, irrigation, and fertilization.

Vertical farming is already HERE?

Vertical farming benefits

No pesticides

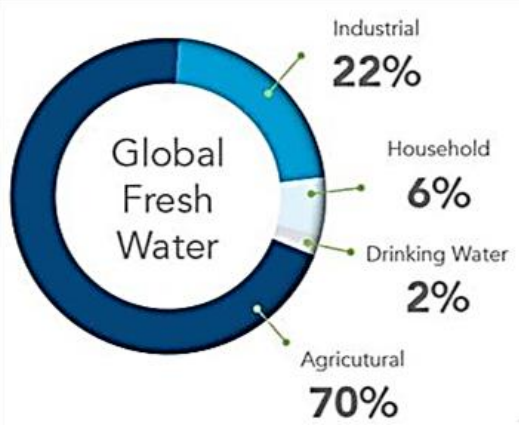
Independent of weather & seasonality

Conserves water & fertilizers

Growing in or close to urban centers

Optimal and uniform yield

Replacing labor with robotics



Our unique advantages

24/7 AgroMaster Control Room:
Effectively Handle Big Data- Utilization of AI and machine learning

Variety is key for:

- Unlocking incredibly large markets
- Advantage over competition

Uniformity is essential for:

- Data-driven optimization driving down OPEX through robotics

Robotics-Growin value proposition

Seeding

Planting

Harvesting

Removing

DATA SCIENCE

- AI AND BIG DATA
- PHENOTYPE ON DEMAND

1%
OF WATER

x16
THE CROP DENSITY

0
PESTICIDES

THE SOLUTION

GrowIn's platform Harnesses Robotics and AI to Optimize Yield, Quality and Minimize Labor

CTRL+ click on button to play movie

Growin innovation

Robotics

Deep Learning

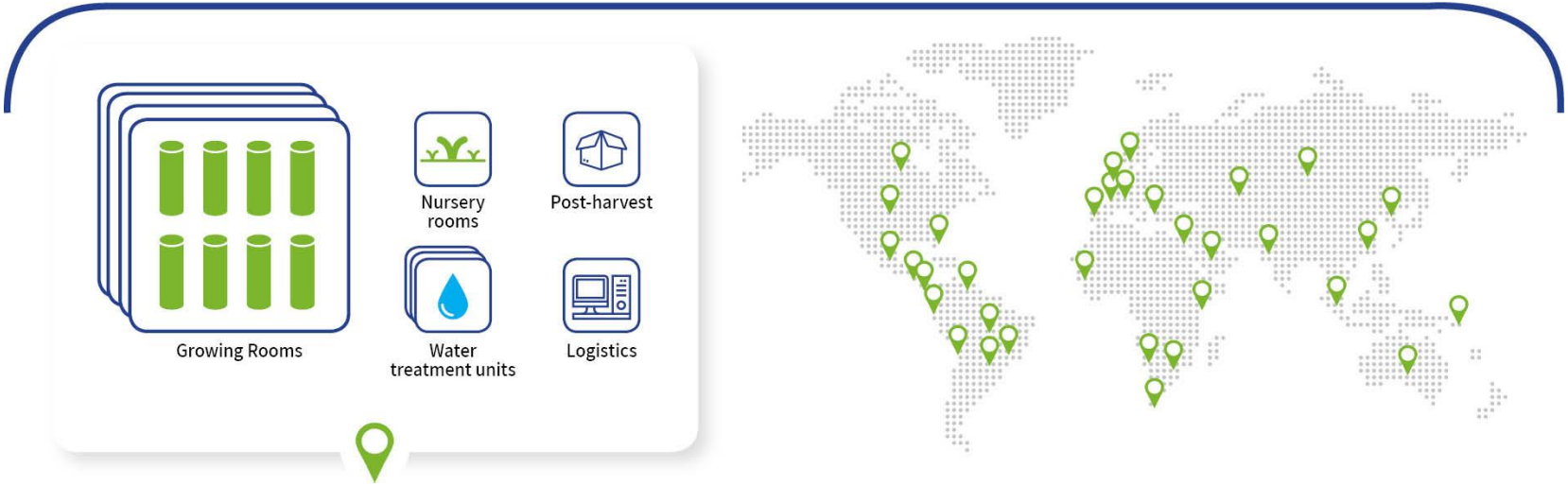
Robustness

Production Planning

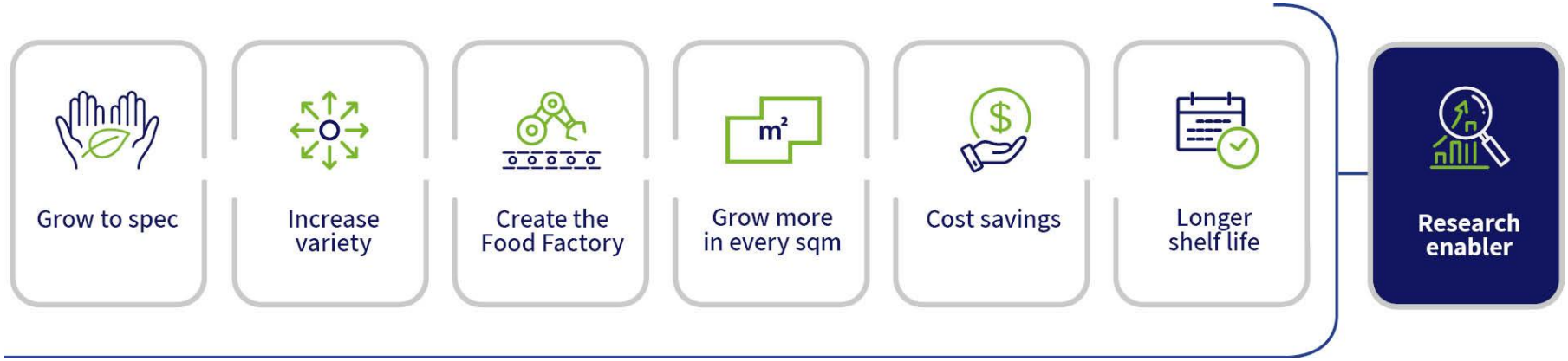
- We have set ambitious targets at Future Crops and we are shaping the agriculture of tomorrow. Unlike most vertical farms, all our products are grown aeroponics-soil less, fully automated Robotic system for crops grown in climate-controlled isolated clean buildings.

- We can grow selected superior crops anywhere in the world, seasonless that are consistent in both quality and yield. Controlling the whole value chain from seeding to **extended food shelf life packaging.**

Modular Fast deployment Technology



Customer value



- The global agriculture sector contributes $3.2 trillion annually to global output and employs about 1 Billion people.
- Data collection and data analytics is the real game changer and businesses who most readily turn those insights into meaningful actions will drive a larger market share.

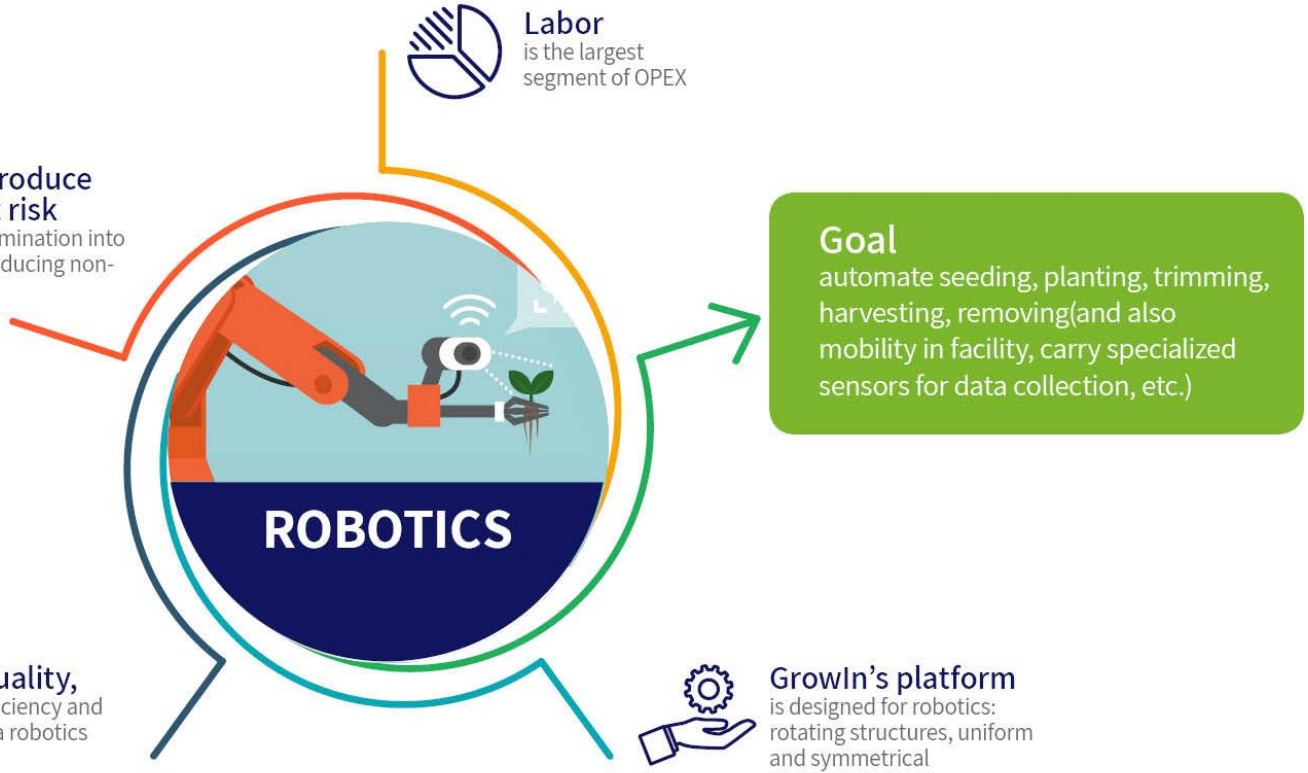
DATA SCIENCE

a. GrowIn’s platform enables data collection for a large set of crops over a huge amount of environmental conditions as temperature, humidity, nutrients, etc.

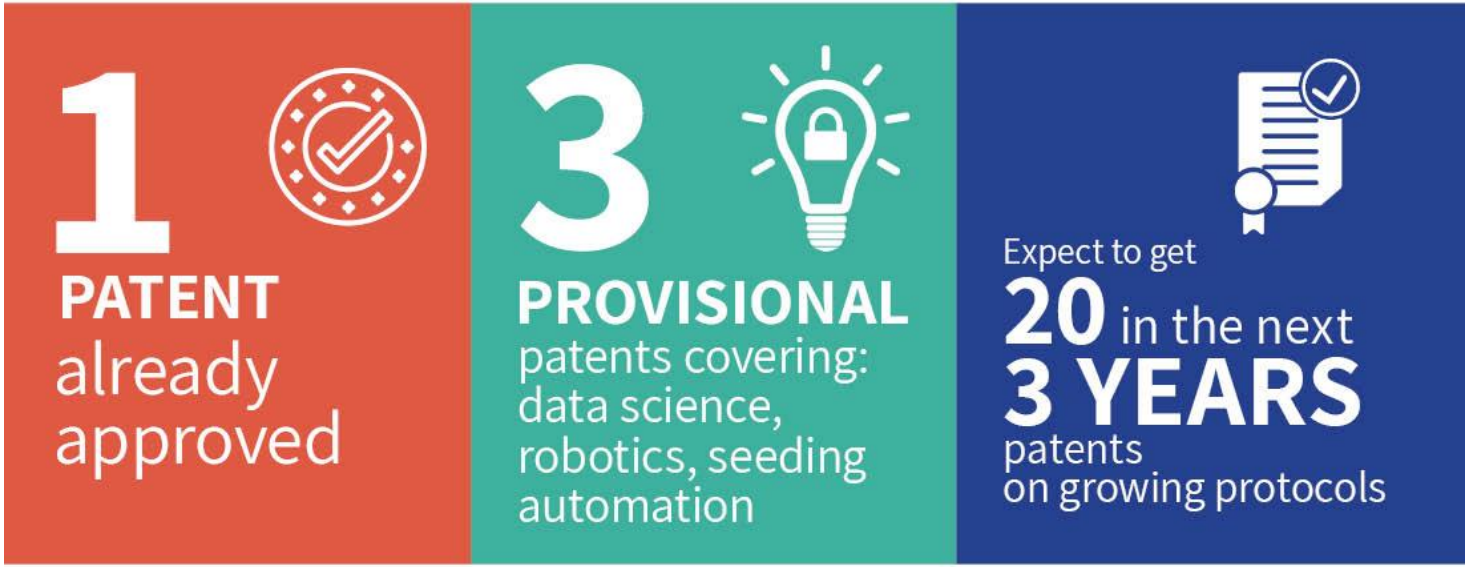
b. State of the art deep learning methods are ready to leverage such data to build statistical models of plant biology, predict growth rate and phenotypes to spec.

c. Bootstrapping data science will benefit greatly from agronomical prior knowledge, knowhow which is abundant in Israel which GrowIn has already tapped into it.

Robotics – More than Ever



IP is our Growing asset



Potential Market

Large Unique Selection

Herbal Products

$102B | 2018

$162.7B | 2026

Berries

$44.8B | 2017

$75.7B | 2026

Pharma Grade Cannabis

$10.60B | 2018

$ 97.35B | 2026

Medicinal Plants

$49.7B | 2017

$84B | 2026

Saffron

$0.72B | 2016

$2B | 2025

Vanila

$0.51B | 2018

$0.735B | 2026

Peppers

$4.1B | 2018

$4.5B | 2026

Mints

$7B | 2019

$7.7B | 2024

Wasabi

$0.3B | 2018

$0.6B | 2027

Curcumin

$0.13B | 2019

$0.16B | 2024

Basil extracts

$0.8B | 2016

$1.4B | 2024

Go to market: target territories

Premium markets

Israel, North America, Western Europe, Scandinavia, Asia - Japan, South Korea, Singapore, Hong Kong, Persian Gulf.

Go to market: potential customers

Food distributors

Supermarkets chains

High end cannabis growers

Industrial

Business Model

Deep Learning Driven Protocols

Growing Platform

Robotics

Recurring

One time

Milestones

	BUSINESS MILESTONES BASED ON BP	TECH MILESTONES
2021	• First operating farm	• Finalize cloud infrastructure • Seeding automation
2022		• First data driven protocol • Robotic deployment
2023	• Significant SaaS revenue starting • Over $100M in revenue within 5 years	

The Best Way to Predict the Future is to create it

growin

Financial forecast

$ Thousands	2021	2022	2023	2024	2025	2026
Revenue	806	15,264	29,620	57,457	84,399	115,969
Gross profit	220	5,553	11,363	24,299	37,066	56,675
Gross margin %	27%	36%	38%	42%	44%	49%
Operating expenses						
Research & Development	1,195	3,344	5,365	7,337	10,632	12,090
Sales & Marketing	-	645	2,491	3,999	6,565	7,852
General & Administrative	716	1,029	1,787	2,182	2,421	2,675
Total operating expenses	1,911	5,018	9,643	13,518	19,617	22,617
EBITDA	-1,685	1,152	3,087	15,126	23,485	44,224
EBITDA %	-209%	8%	10%	26%	28%	38%
Cash Flow (excluding investment)	-3,089	-6,941	-3,522	629	7,516	35,759

Sales Financials

$ Thousands	2021	2022	2023	2024	2025	2026
Growing platforms						
Food	-	5,184	7,776	24,883	40,609	59,624
Cannabis	806	10,080	18,144	21,289	24,153	26,754
	806	**15,264**	**25,920**	**46,172**	**64,763**	**86,379**
Robotics						
Food	-	-	**640**	960	3,200	5,440
Cannbis	-	-	800	1,440	1,760	2,080
	-	**-**	**1,440**	**2,400**	**4,960**	**7,520**
SaaS						
Food	-	-	518	2,986	6,115	10,641
Cannabis	-	-	1,742	5,899	8,561	11,429
	-	**-**	**2,260**	**8,885**	**14,677**	**22,070**
Total	**806**	**15,264**	**29,620**	**57,457**	**84,399**	**115,969**

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