





# BE EXCEL LENT

The next revolution in agriculture -  
Growing MUCH MORE  
with MUCH LESS

**Izhar Gilad**  
Head of commercial & business development  
Digital farming



-  Why the world needs a new way to grow?
-  Drip – The first revolution in irrigation
-  Digital Farming – The next revolution in Agriculture
-  NetBeat – Irrigation with a Brain

# The world's need for food is growing. Fast.



By 2050 there will be  
**10 billion**  
of us



We'd need  
**60%**  
more food

# And our resources are limited.

The World in 2050



**25%**

less water than we need

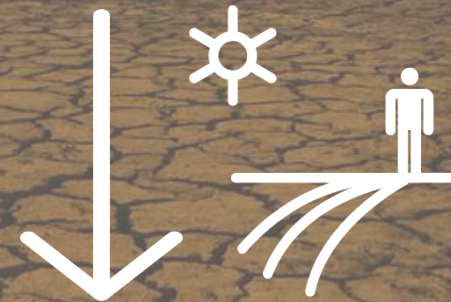
**4 Billion** 

living under severe water stress



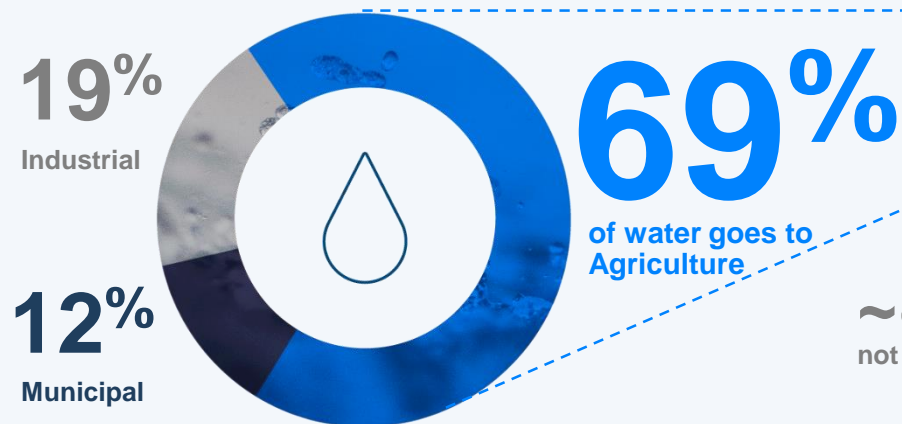
**20%**

less arable land per person



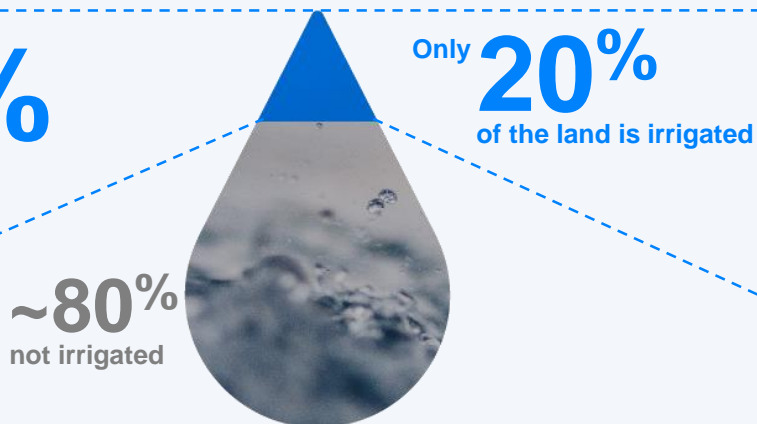
# We are not efficient in how we use our water and land.

Global water withdrawal by sector



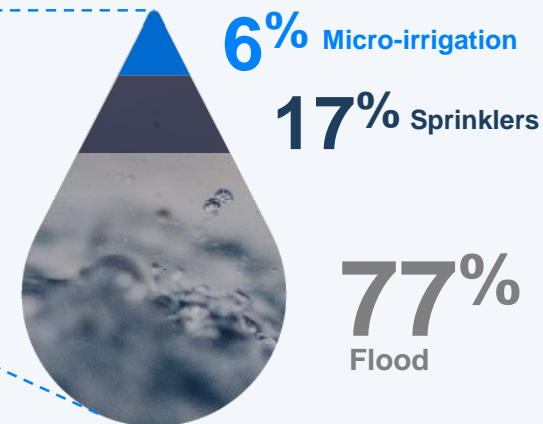
69% of the world's water use goes to agriculture

Irrigated area as % of arable land



This water is used to irrigate only 20% of the arable land. The rest pray for rain.

Global irrigated area by method



Still, 77% of the irrigated land is done inefficiently, by flood irrigation

# Precision Irrigation enables farmers to **Grow More With Less**



Drip is irrigating the **plant** and not the soil

Netafim introduced drip irrigation to the world over 50 years ago

With drip growers generate **higher and better quality yields** and **saves significant water** vs. traditional irrigation

# Helping the world grow more.



**~30%**  
market share

**#1**   
irrigation  
company

**17**   
manufacturing plants

**29**  
subsidiaries

  
HQ in Israel

 **~5,000**  
employees

**110+**  
countries

**> 1 Billion \$**  
sales

Serving millions of farmers around the world

# Digital farming is the next revolution in agriculture



MONITOR  
ANALYZE  
AUTOMATE





# The Role of Digital Farming

- Improving farmers' decisions making
- Deliver more value per hectare
  - Higher and better yields
  - Lower cost
- Traceability - Clean and safer food
- Will keep the young generation at the farm
- Providing Peace of Mind

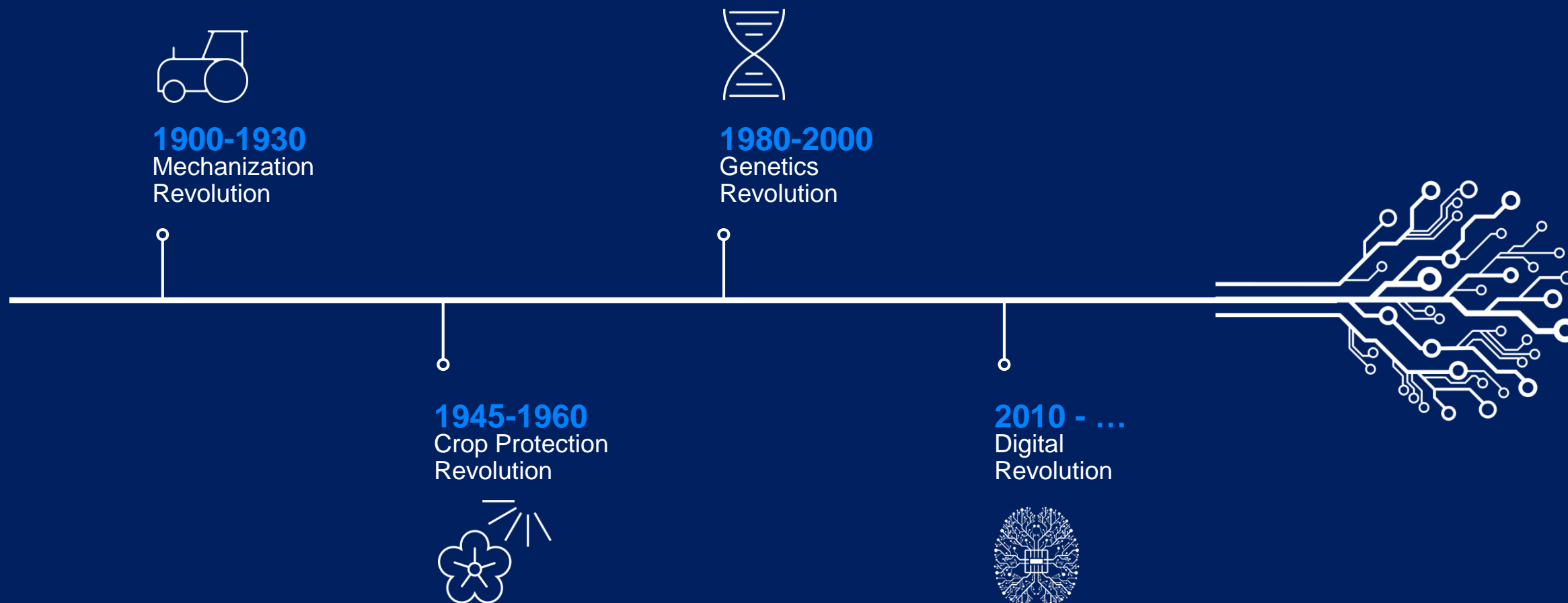


## Why Now?

- Growing need for increased yield and efficiency
- Technology has become...
  - ...More **advanced**
  - ...More **accessible**
  - ...More **affordable**
- Farmers are getting more advanced and tech-oriented



# Digital Farming Revolution - Agri 4.0



# The Digital Farming playground

1

**Jobs in the office**  
Farm Management

2

**Jobs with equipment**  
Assets / Machinery  
Management

3

**Jobs in the field**  
Crop Cycle Management

## ...and Across 3 Dimensions of Activities

**Monitor**  
Data &  
Analysis

**Analyze &  
Recommend**  
Decision  
Support

**Control**  
Implementation  
Support





NetBeat™ combines  
real-time data with  
Dynamic Crop Models™



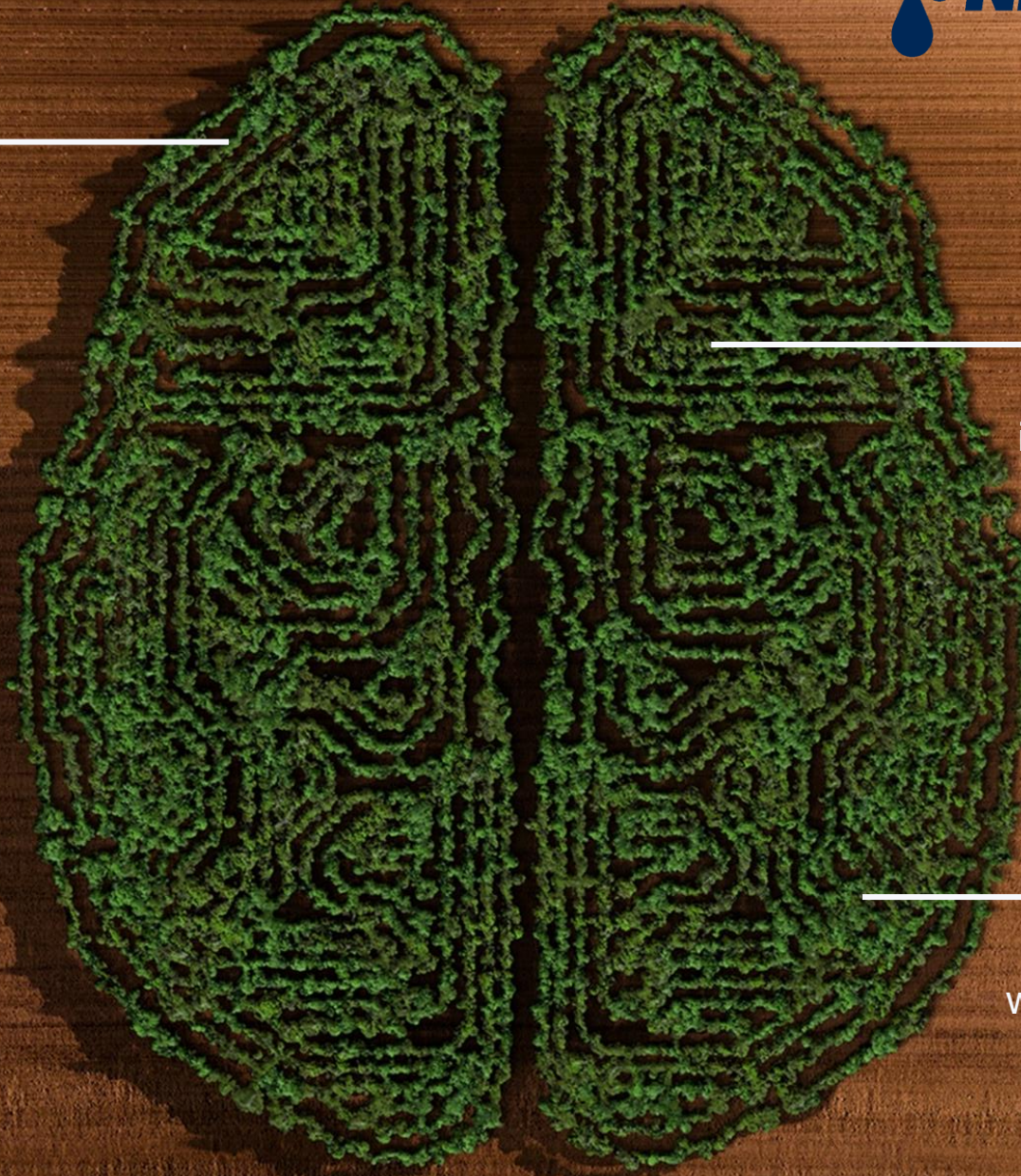
to personalize  
irrigation programs  
and optimize  
yields

# NetBeat™

The First Irrigation  
System with a Brain



while minimizing  
water and resource  
use





# Israeli cutting-edge technology in the service of agriculture

Leveraging Netafim's **50+ years** of experience in Agriculture and **20+ years** of providing Digital Farming solutions

**3 years** of development

**40+ engineers** from Israel's leading tech companies

**100,000+ hours** of software & hardware development

**Military grade technology:** in cooperation with mPrest, the Iron Dome system developers





External sources



Cloud-based analytics

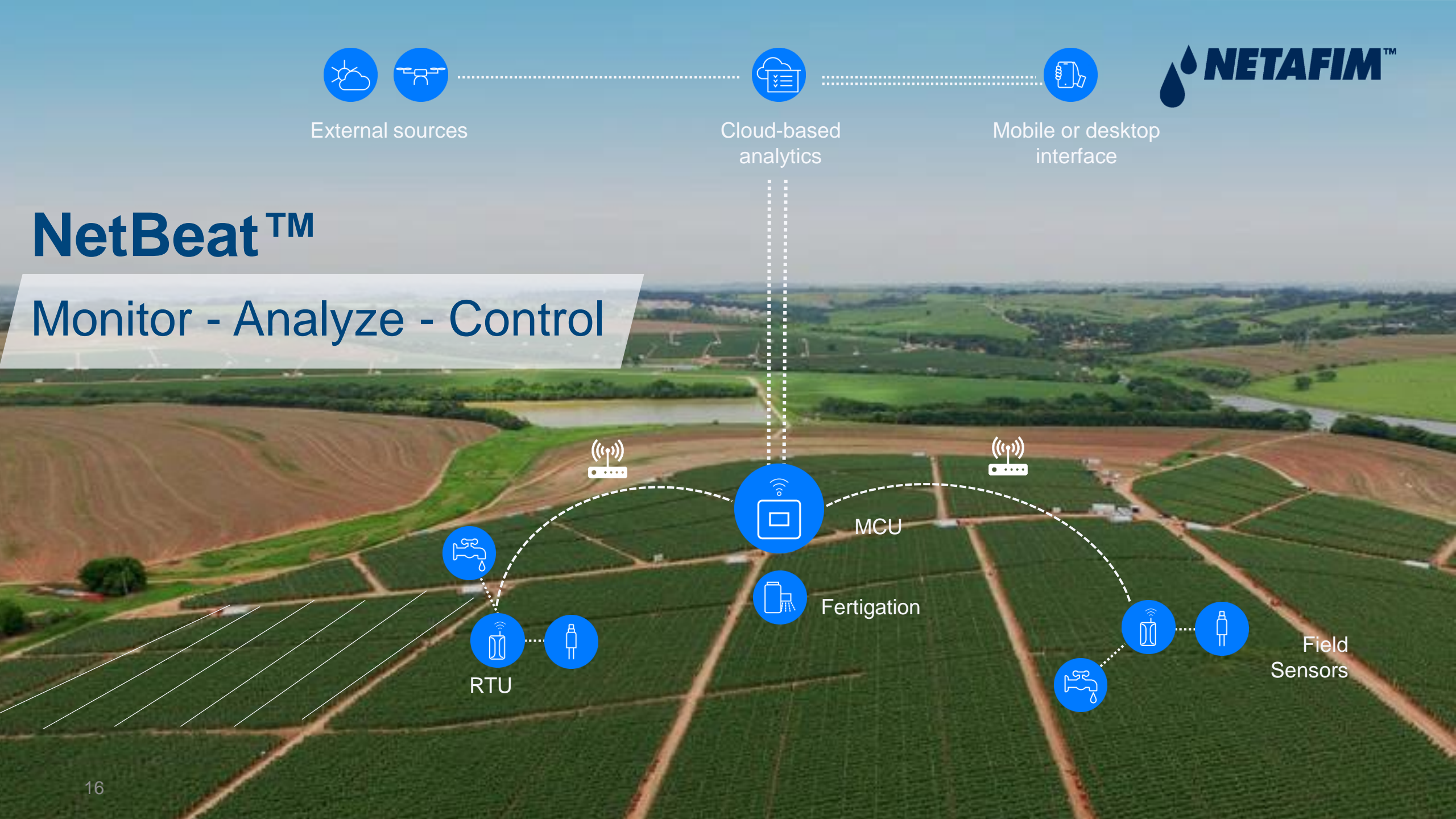


Mobile or desktop interface



# NetBeat™

## Monitor - Analyze - Control





# The 5 innovations of NetBeat™

1 

**/ All in one**

Integrating in real-time monitoring, smart analysis, and control

2 

**/ Strong “Brain Power”**

Dynamic crop models for irrigation and fertigation,

3 

**/ Cloud technology**

Allows third party data integration, remote access, support and updates

4 

**/ Simple & Intuitive**

Robust system with user friendly and customer-centric interface, from any device

5 

**/ Smart irrigation for all**

addresses all farmers – From advanced corporate farms to smallholders

# NetBeat™ covers the world

May 2019



S A  
T B  
U C  
V D  
W E  
X F  
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Z H  
A I  
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1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0

Analytics

Sensors

Farm  
Management

Imaging

Input Models

Data

**NetBeat™ is an open system  
A platform for add-on technologies**

# What does NetBeat™ enable growers?



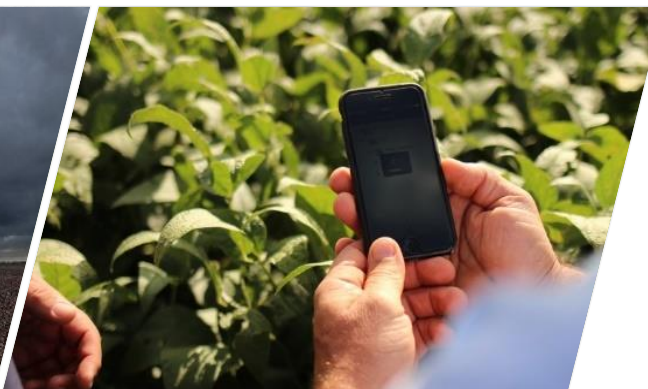
**More  
Yields**



**Less  
inputs**



**Reduced  
risk**



**Ease  
of use**

Helping farmers to  
**Grow Much More with Much Less**

# Lesson Learned

- Management sponsorship is KEY!
- Put your money (& investments) where your mouth is...
- Each Country is different – no one-size-fits-all
- Change in mindset - Internal change management is harder than external (customers, partners)
- Internal communication – create momentum & enthusiasm
- Education & Skills Set Program – Sales, Technical
- Transition from industrial company to data & services company



thank  
you

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LEAN  
ISRAEL  
LASTING FLEXIBILITY