

# AI; A New Tool For Agriculture

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# ROBOT CAFE

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**We are on the verge of a digital revolution—will you shape it, or will it shape you?**





HEALTH



FINANCE



TOURISM



MEDIA



SECURITY



AGRICULTURE



# HEALTH

## Virtual Therapists

- AI + cognitive-behavioral therapy (CBT) + Immersive Experiences with VR/AR

## Robotic-Assisted Surgery

- Examples: Da Vinci Surgical System and Medtronic's Hugo



# TRANSPORT

## Waymo's commercial ride-hailing service

In 2023, Waymo achieved over 700,000 ride-hailing trips with public riders in its fully autonomous vehicles



# MEDIA

## AI-powered presenters

AI and NLP) and speech synthesis – interact more naturally with audiences, read news in a human-like manner, and even respond to viewer questions in real time.



# AGRICULTURE



# AGRICULTURE

## Autonomous tractors

- Plant, till, and harvest crops without human intervention
- Use GPS, sensors, and AI to navigate fields, detect obstacles, and carry out tasks with high precision, reducing labor costs and increasing operational efficiency.
- Plant, till, and harvest crops without human intervention



# AGRICULTURE

## Autonomous tractors

- Operate 24/7,
- Cover an average of 250 acres daily (998 days for normal human),
- Saving farmers an estimated \$10 billion annually in labor costs worldwide.



# AGRICULTURE

## IoT, AI, and data analytics

Precision farming reduces pesticide usage by 80% and water consumption by 50% while increasing yields by 30% (FAO, 2021)



# AGRICULTURE

## Smart Irrigation: Tackling water scarcity

- Agriculture accounts for 70% of global freshwater withdrawals (World Bank)
- Save up to 45% more water than traditional systems (IFPRI, 2020) and enable precise delivery of nutrients with the water.

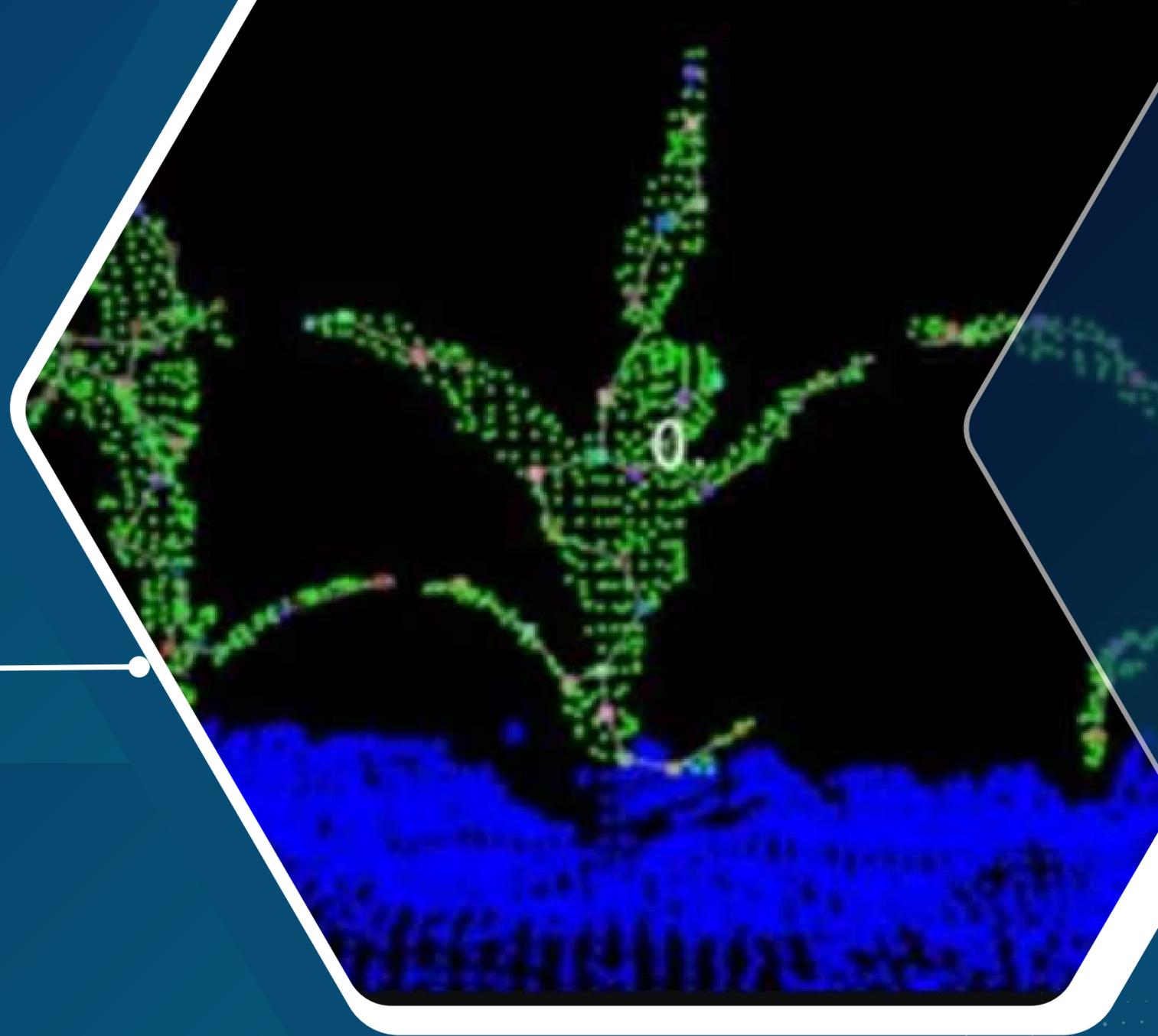


# AGRICULTURE

## Weeding

Computer vision and machine learning algorithms to distinguish between crops and weeds; then spray herbicide only on the weeds, reducing chemical usage by up to 90% while minimizing crop damage.

.....**Blue River Technology**



# AGRICULTURE

## AI-crop monitoring and pest detection

- Crop diseases and pests cause upto 40% loss in global agricultural productivity (FAO, 2020)
- AI devices detected pests early, reducing crop losses by 35%.



# AGRICULTURE

## Yield forecasting and planning

- Use data from crops and environmental conditions to estimate yields
- Help farmers plan harvesting schedules and marketing strategies



# AGRICULTURE

## Climate monitoring and adaptation

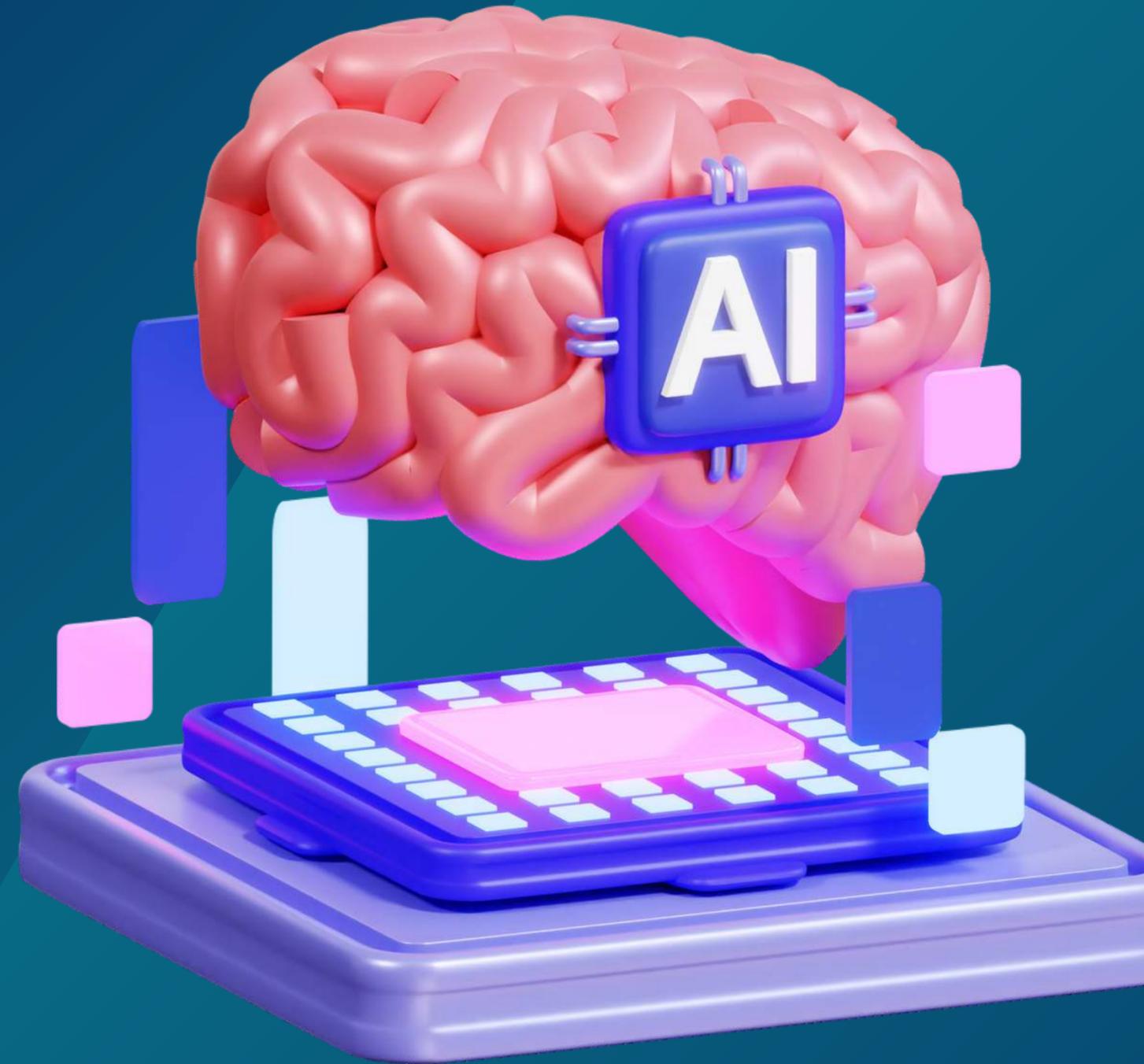
Real time weather updates and forecasts

Data-driven decisions by farmers



# Digitalization:

- ✔ Presents tremendous potential to transform the industry by improving efficiency
- ✔ Making farming more sustainable
- ✔ More economically viable and globally scalable
- ✔ Reducing resource waste
- ✔ Improving climate resilience



# Stimulating digitalization;

✔ More funding accessible



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- ✔ Overcome fear of job displacement



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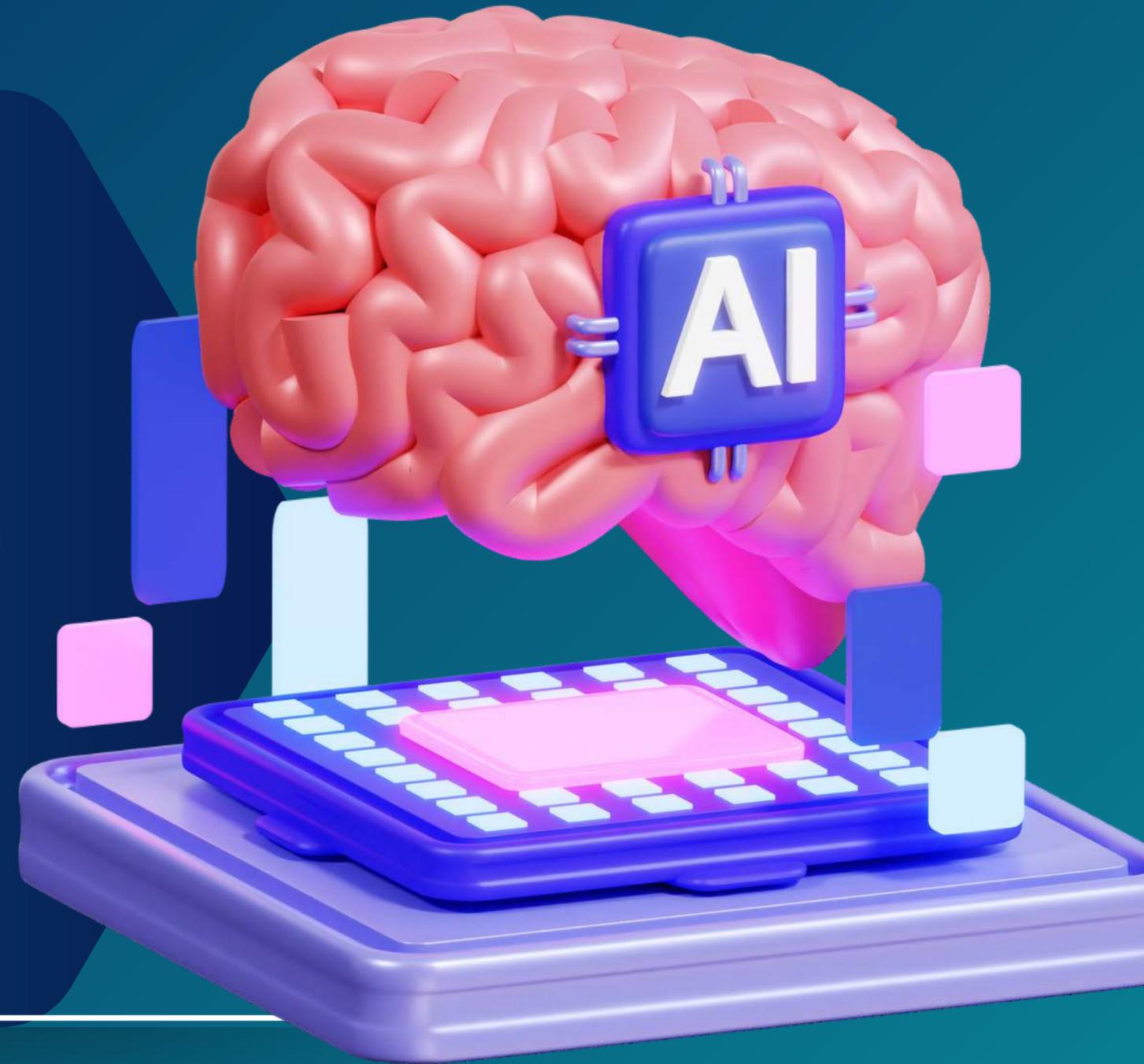
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✔ **Let's walk the talk**



Thank you



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More Information  
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