

Richard van Hooijdonk

KEYNOTE

AI & the future of agriculture

In the smart greenhouse and on the intelligent livestock farm, sensors, robots and AI work together for better harvests, better-quality food and higher standards of animal welfare. How far agriculture takes this is up to the people in the farmyard, in the greenhouse and in the cooperative.

Precision in the greenhouse, care for every animal. AI and robotics give farmers and growers new ways to improve yield, soil health and animal welfare at the same time.

Sensors, robots and AI can add to the skill of farmers and growers; futurist and trend watcher Richard van Hooijdonk shows what that looks like in the farmyard. This keynote covers what is possible now and what becomes possible around 2040. Agriculture has fewer hands, stricter rules on nitrogen, water and crop protection, and erratic weather in a changing climate. Sensors already measure each plant and each animal, cameras tell weeds from crops, and milking and harvesting robots take on heavy work. Over the next ten to fifteen years it goes further: swarms of light robots in the field, a digital twin of every animal, large-scale regional refining of grass into protein, and farmers paid for carbon storage and nature management they can prove. The biggest question is often whether family farms that run on generations of experience can learn to work with systems that monitor alongside them and share in decisions, while the farmer's skill and judgement stay at the centre. The keynote shows what is in the farmyard today and what is on its way to 2040. The farm of the future needs technology that adds to that skill and fits the people who use it.



RICHARD VAN HOOIJDONK

Richard van Hooijdonk is a trend watcher, futurist and international keynote speaker. Many trend watchers and futurists look at the future from a distance. Richard van Hooijdonk lives in it. His team consists of people and AI agents, and he has several chips implanted in his body. He speaks about AI and new technology, the organisation of the future and leadership in the AI era. He takes you into a future you can barely picture today, and shows how you can steer it yourself.

3,000+	650,000+	30+	Bestselling
keynotes	participants	countries	author

What the keynote covers

NOW AI in agriculture

What AI already does today in the field, in the barn and in the greenhouse.



01 Precision farming

Sensors, satellites and drones measure each field or even each plant. AI sees where water, fertiliser or crop protection is needed.



02 Smart livestock farming

Cameras and sensors follow every animal. AI flags changes that may point to lameness, illness or a cow coming into heat.



03 Robots on the farm

Milking robots are commonplace; weeding and harvesting robots are gaining ground. Image recognition tells them what is in front of them.



04 Crops and animals by design

Gene editing can make crops more resistant to drought and disease, and animals less vulnerable. AI helps find the genes that matter.



05 The greenhouse run by AI

AI tunes climate, light, water and nutrients in the greenhouse to what the plant needs, with the grower in charge.



06 Breeding with data

DNA and measurements help estimate the inherited potential for health and efficiency. AI supports the breeder's choice.



07 Measuring emissions in barn and field

IN PILOTS

Measurements and models show the emissions of each farm. AI shows which change to feed, manure or cropping makes a difference.



08 Forecasting harvest and market

AI predicts yield, quality and price, so growers, cooperatives and traders can plan earlier.



09 Agents and advice for farmers

IN PILOTS

In trials, agents already advise on crops and feed. Next, they will deal with buyers' and suppliers' agents. The farmer sets the limits.

COMING NEXT The future of agriculture

Where agriculture could be in five to fifteen years, with AI as the engine.



10 The robot swarm in the field

FUTURE SCENARIO

By 2040, swarms of light robots work the land day and night. The farmer runs a fleet instead of driving a tractor.



11 A digital twin for every cow

FUTURE SCENARIO

Around 2040, every animal has a digital twin that predicts illness sooner and works out what other feed or barn climate would do.



12 Paid for carbon and nature

FUTURE SCENARIO

Around 2040, AI links field data and satellite images to payments for carbon, water storage and nature. That could be a second income.



13 The farm as a refinery

FUTURE SCENARIO

Around 2040, protein from European grass could replace much of the soya in pig and poultry feed. AI runs the regional refining.

PEOPLE & ORGANISATION The agricultural organisation of the future

What AI asks of roles, teams, leaders and culture on the farm, at cooperatives and at suppliers.



14 The AI-first organisation

In barn and greenhouse, AI and new technology take on repetitive and predictive work. Growers and stock farmers focus on animals, crops and choices.



15 New jobs in agriculture

Fleet managers for robot swarms, remote growers and people who teach a model to see with the eye of an experienced farmer.



16 Leadership in agriculture

Leaders in agriculture make the first move on AI and new technology, and bring family, members and staff with them in practical trials.



17 The future academy

Farm businesses are not waiting for the education system. In their own future academy, the work on the farm is the curriculum.



18 Growing within an ecosystem

Climate, scarcity and labour shortages call for collaboration. With start-ups, scientists, partners and governments, answers come sooner.

THE OTHER SIDE

The other side: responsibility and risk

Data, reliability and crime: the flip side of a farm that runs on data.



19 Data as the foundation

Complete data from barn, greenhouse, field and farm records can help AI work well. That is the foundation of a farm that works with AI.



20 Reliable advice in the field

Wrong crop or feed advice hits the harvest and animal welfare. A language model can be wrong with all the confidence of an expert.



21 Crime in the countryside

Hacking of critical infrastructure and systems, in barn and greenhouse alike, is a threat. In the AI era, good security counts for more.

DURATION
30, 45, 60 minutes or longer, with time for questions

LANGUAGE
Dutch or English

FORMAT
On location or online

FEE
On request

PLUS

"Richard succeeded excellently in waking up our leaders and setting them on the path to the future: after the lecture, discussions took place across various parts of the organisation about the topics covered, and initiatives have been set in motion."

Aart van Haren Managing director, PLUS

Deloitte.

"A dazzling journey through new technology. The enthusiasm and energy during his presentation, combined with the visuals, provided a successful kick-off to our event."

Patrick Steemers Partner, Deloitte

Interested in a keynote for your agriculture event?

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