

DEEPFIELD ROBOTICS

2016 WORLD FORUM FOR A
RESPONSIBLE ECONOMY

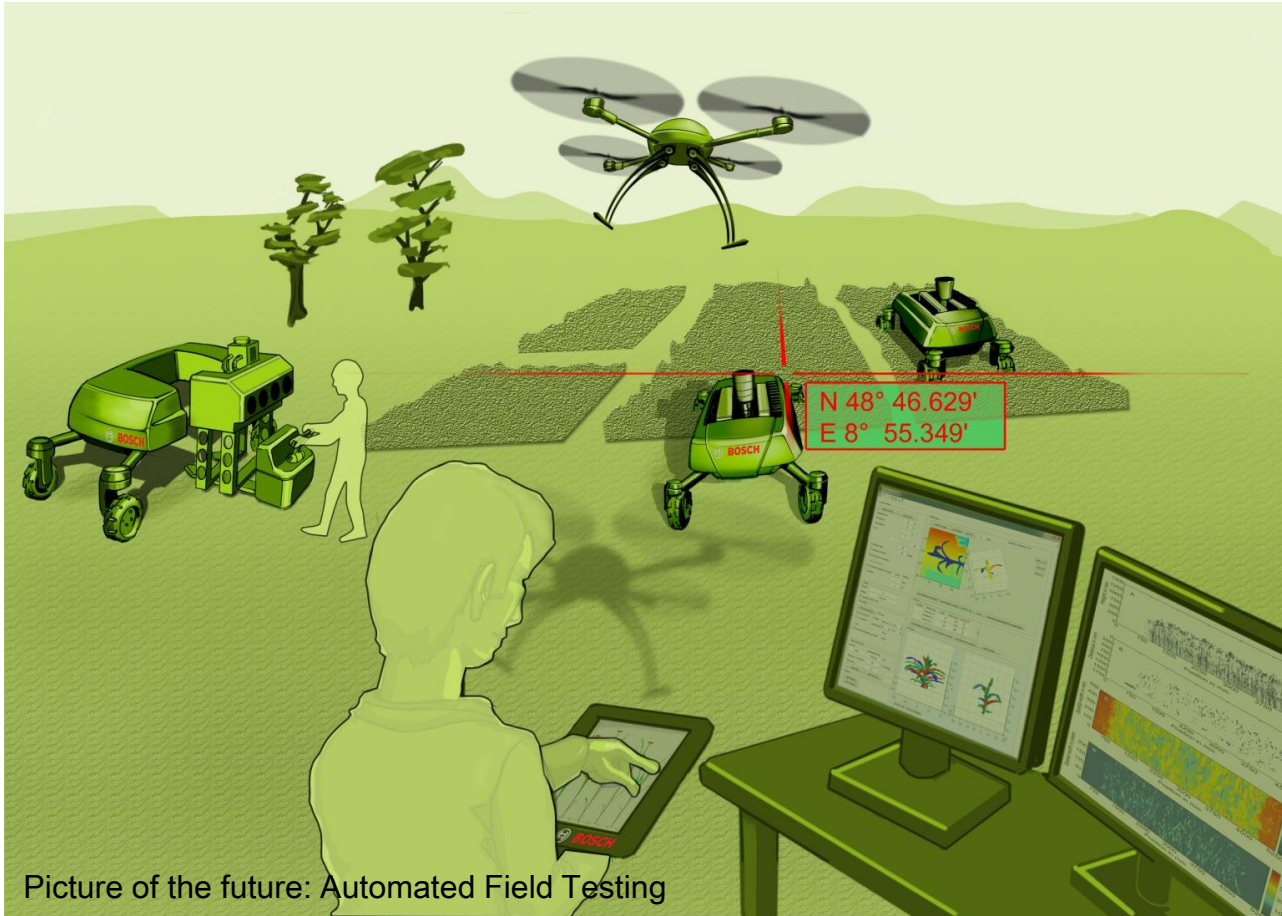
FROM THE INTERNET OF FIELDS TO THE
INTERNET OF PLANTS

ROLAND K. TSCHAKAROW
BOSCH DEEPFIELD ROBOTICS

World Forum Arras

Deepfield's ingredients for the Ag future

Deepfield Robotics
A Bosch Start-Up Company



Picture of the future: Automated Field Testing



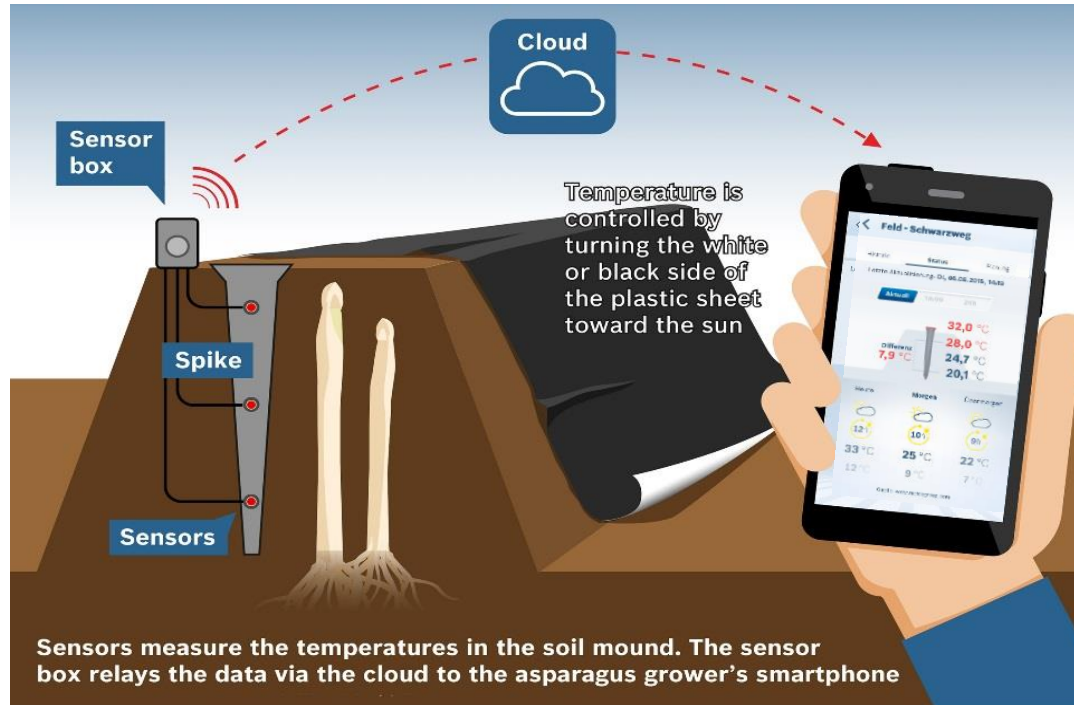
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From the Internet of Fields, ...

Deepfield Robotics

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► Telemetry on fields: Deepfield® Connect - Asparagus Monitoring



World Forum Arras ... to the Internet of Plants

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Conventional Seed
quality field trials

TODAY



Every year from March till June

Weather
dependent



Much manual work

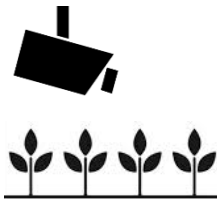


TOMORROW
High Throughput
Field Screening



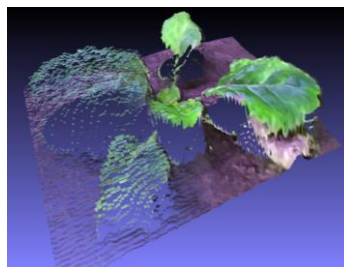
Plant Counting

Rate of Field Emergence + Plant-by-Plant 3D Leaf Area + Related Weather Conditions

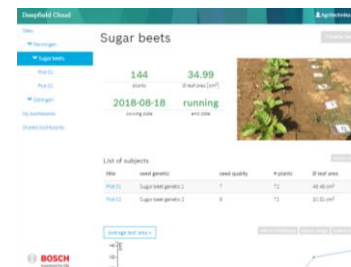


Automated Workflow

Plant Growth Tracking



High Quality Data



“Plant data base” for each
individual plant

Result



Improved Seed Quality
based on better decisions

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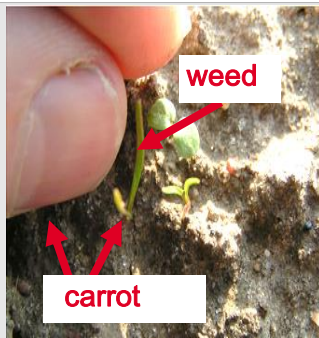
... and Selective high-density Weeding

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Weeding in organic farming

TODAY



“Ag-tsunami”

labour costs,
banned chemicals,
resistances, super-weeds, etc.

TOMORROW
Automated herbicide-free weeding



Mechanical high-density weed control

Weeding mobile

32 pneumatic actuators,
up to 20 weeds/s

THANK
YOU