

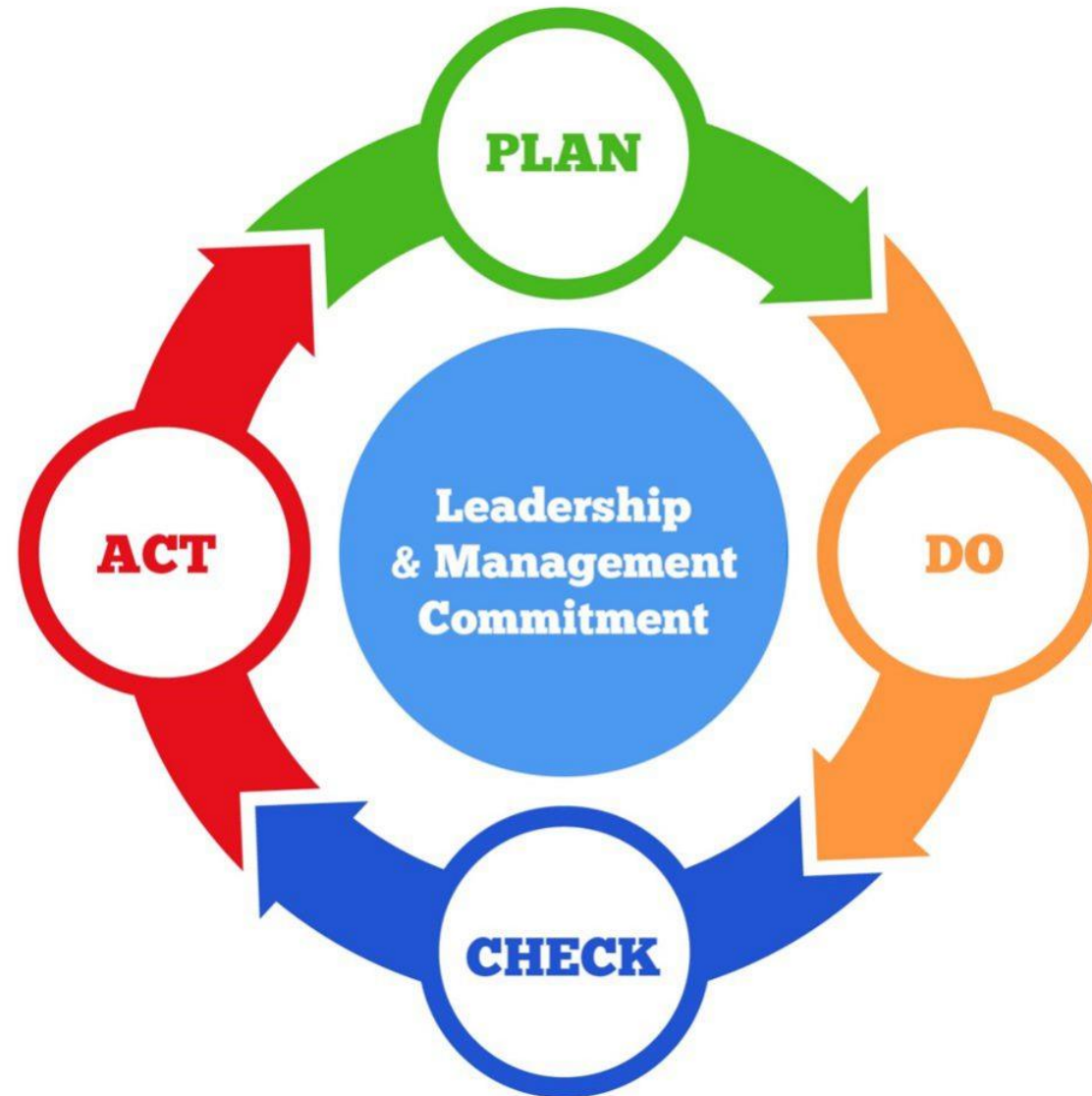
# Fresh Fruit Robotics

*The 21<sup>st</sup> Century Orchard Management Solution*

*Orchard Solutions*

*Orchard Insights*







# Specialty Crops



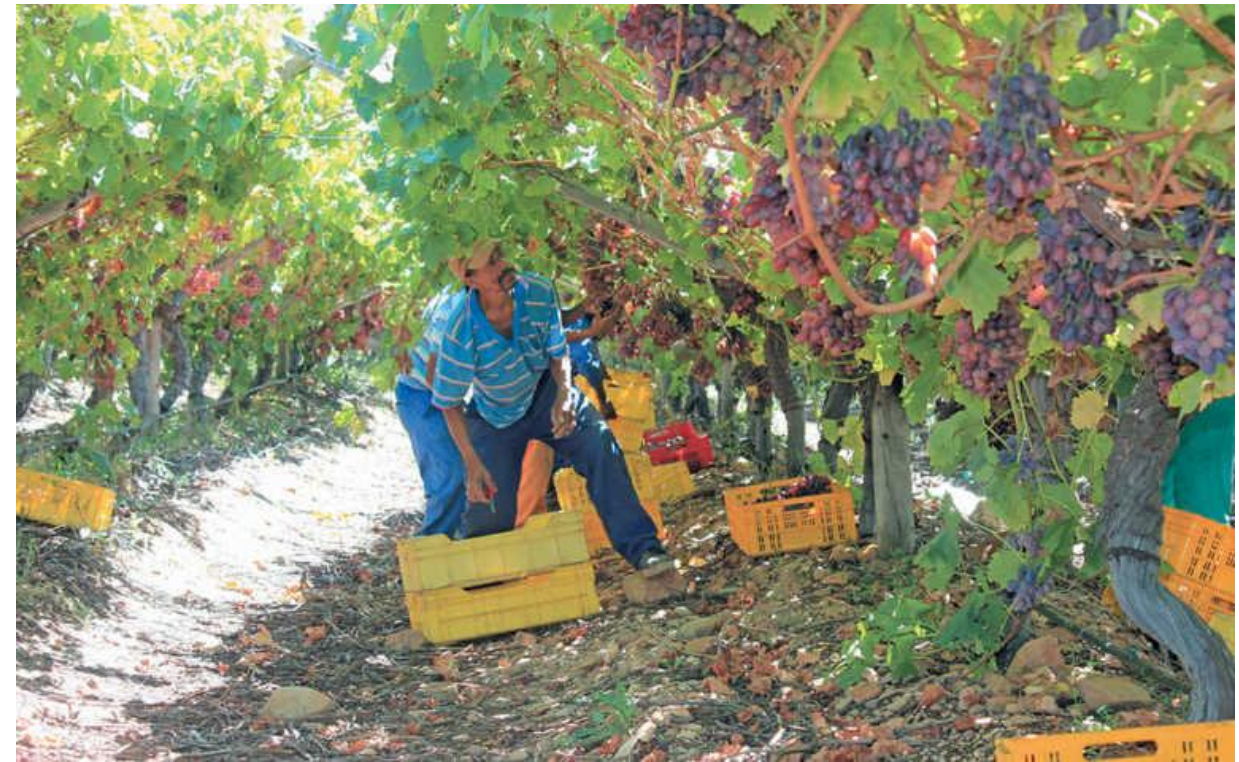
# Orchard Management System













# CURRENT PRACTICE





# CURRENT PRACTICE













# CURRENT PRACTICE



April 2021







<http://gussag.com/>



1936



# Modern Times

## Charlie Chaplin

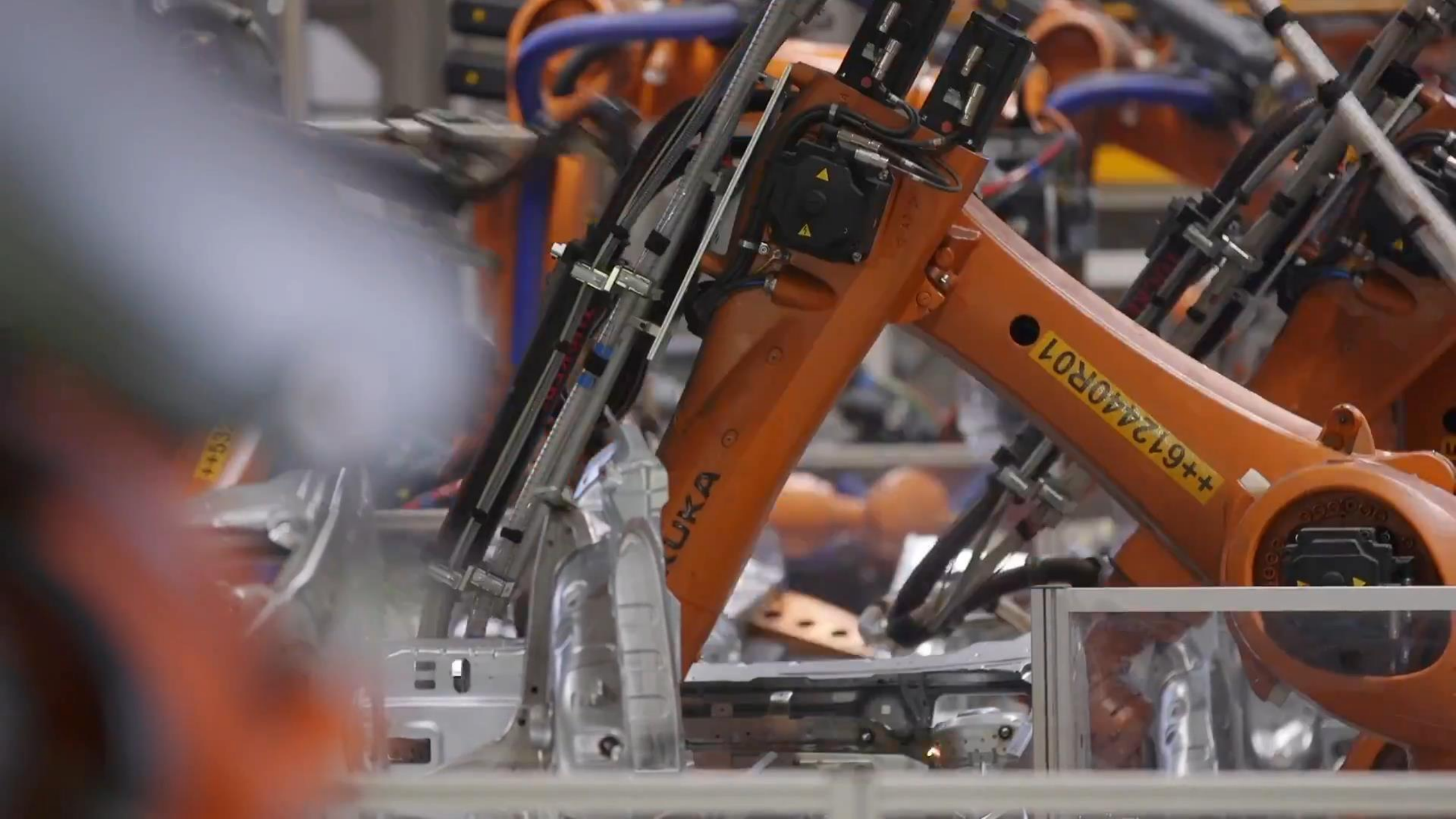
Modern Times © Roy Export SAS





Modern Times © Roy Export S.A.S.





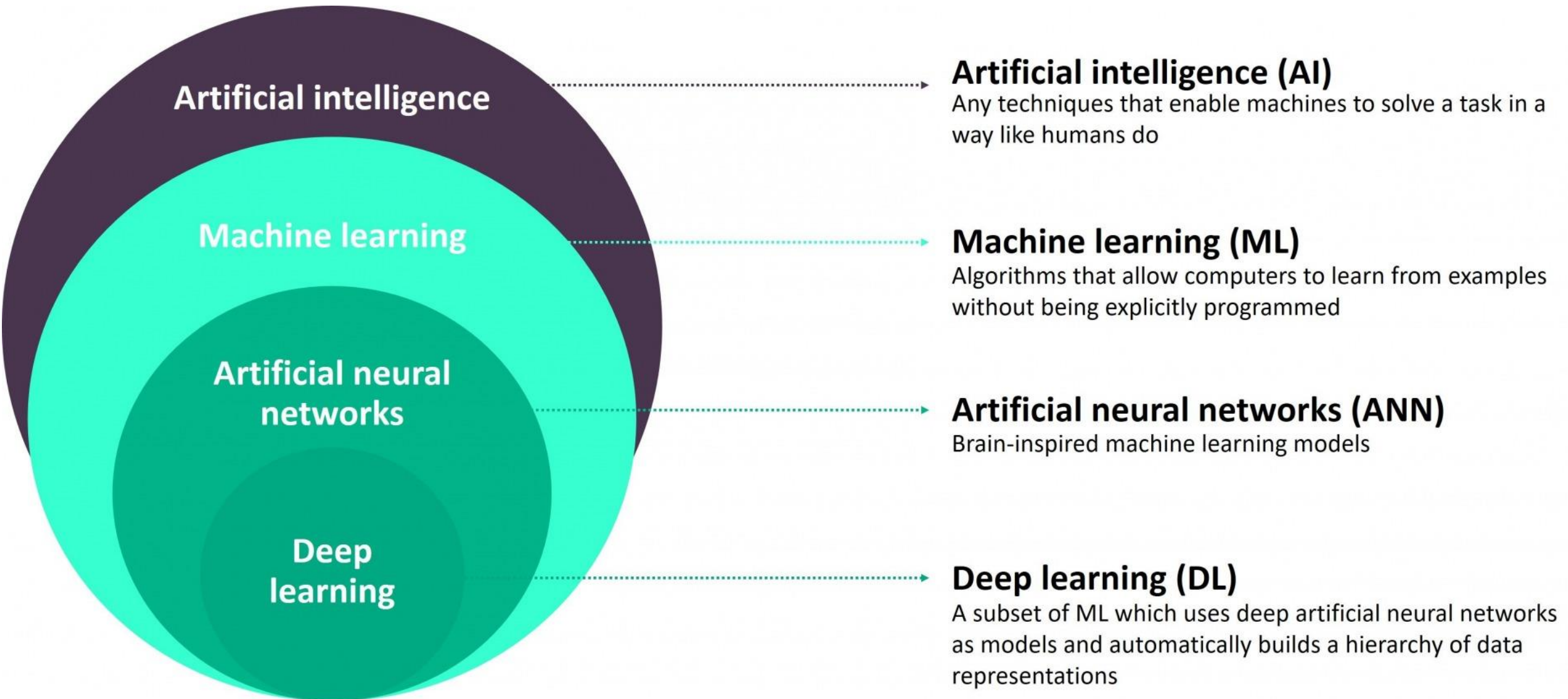


# Bill Gates: the robot that takes your job should pay taxes ...





# Artificial Intelligence & Machine Learning



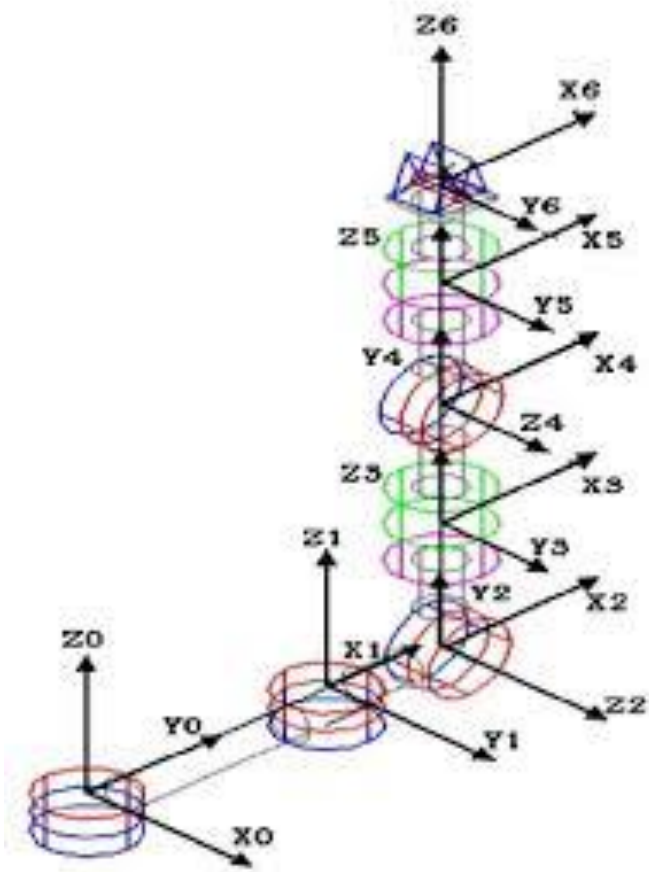


















Think Different



**We need a paradigm shift**





# 21<sup>st</sup> Century Orchard Management



Cost & Quality Management  
Mechanization  
Automation



April 2021



Sustainability  
Documentation/Traceability  
Insights  
Action



# Modern Orchards



April 2021







GOOD FRUIT  
GROWER



## Emulate Human Picker



- Look
- Analyze
- Identify
  - Location
  - Color
  - Size
- Pick/No Pick
- Path planning
- Reach
- Pick
- Place
- Learn

## Artificial Intelligence & Machine Learning









# Predictions





# 21<sup>st</sup> Century Orchard Management



Cost & Quality Management  
Mechanization  
Automation



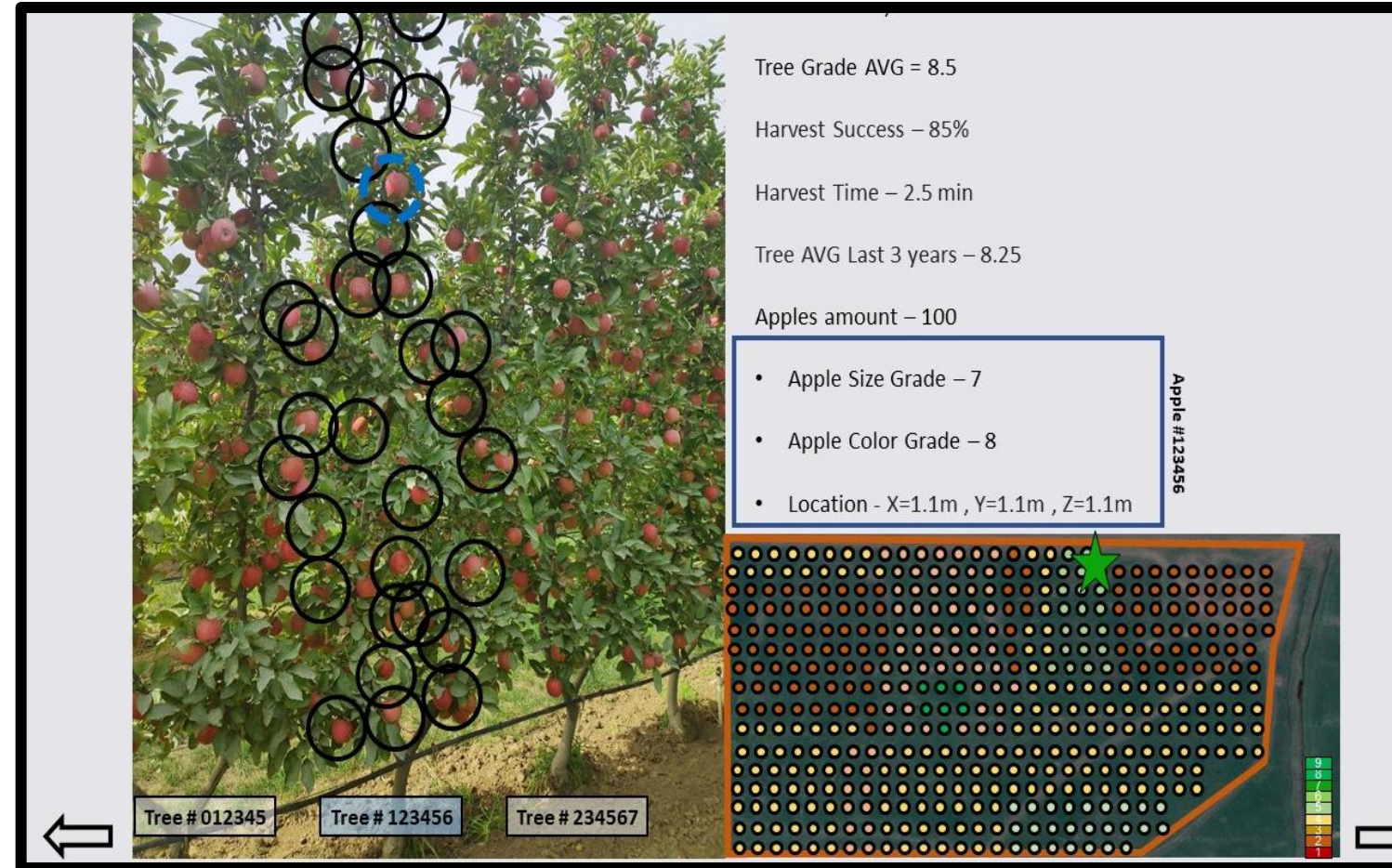
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Sustainability  
Documentation/Traceability  
Insights  
Action



- Cloud Services
- Integrate data inputs from other sources
- Reporting & data analytics
- AI - recommendations based on grower's orchard & global data



# Improve Fruit Production with FFR Integrated System



Automating & Documenting Critical Production Tasks Improves Fruit Production, Quality, and Sustainability





# Value for the Growers – More Target Fruits



**Minimizes** labor dependency

**Reduces** harvesting costs

**Improves** fruit quality

**Increases** sustainability



Replaces 25 - 30 laborers per day

Operates 24/7

Picks 4-5 bins per hour (8,000 fruit/hr.)

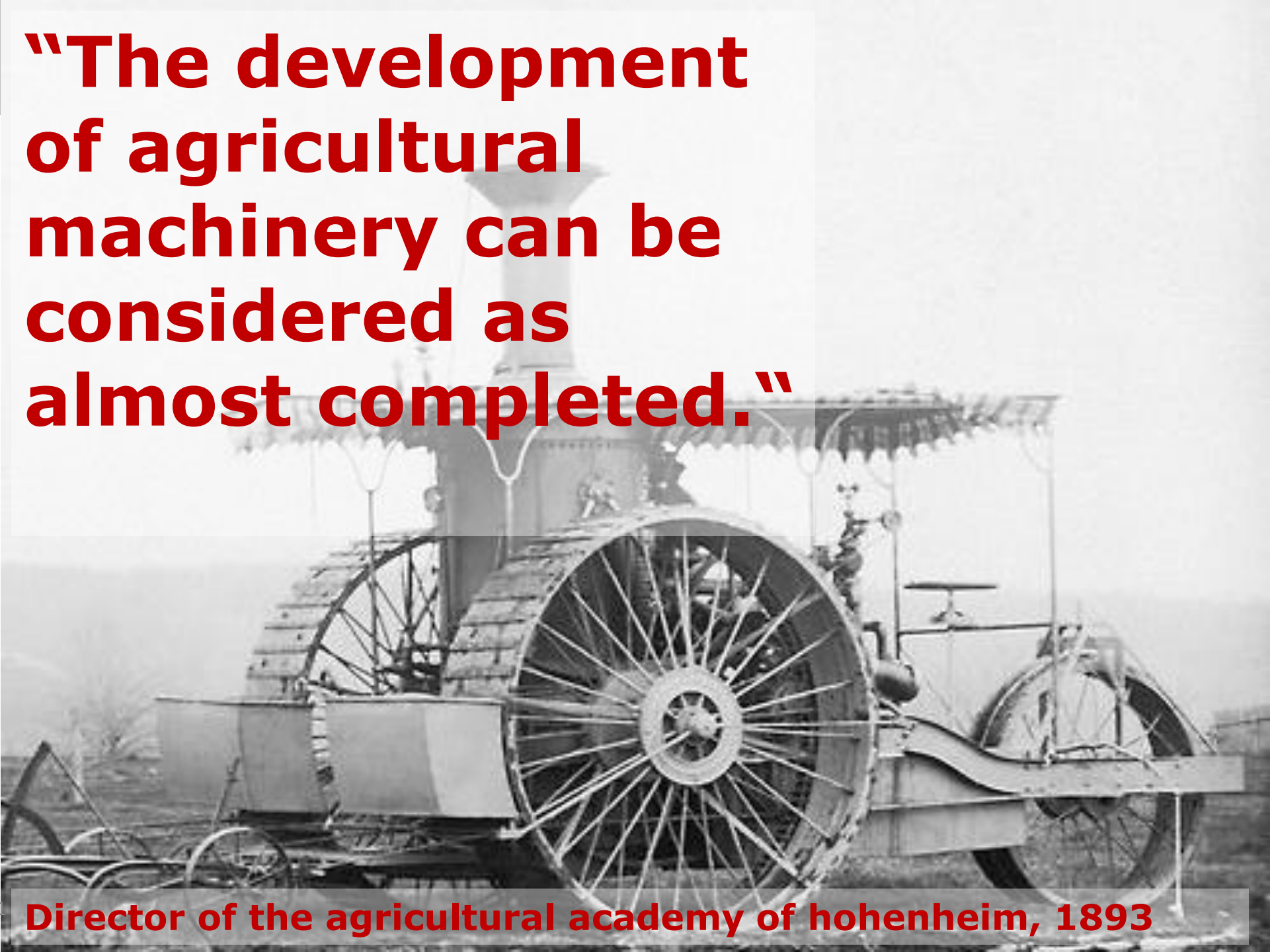
Easy to operate & maintain

Picks fruit per grower's pre-set criteria

Collects data for orchard analysis & traceability



**“The development of agricultural machinery can be considered as almost completed.”**





# Fresh Fruit Robotics

*.... is the fulfillment of a life-long dream to automate fruit harvesting*

*Orchard Solutions*

*Orchard Insights*

