

Redefining agricultural insurance: How Artificial Intelligence and the Internet of Things Transform Evaluation and Risk Management

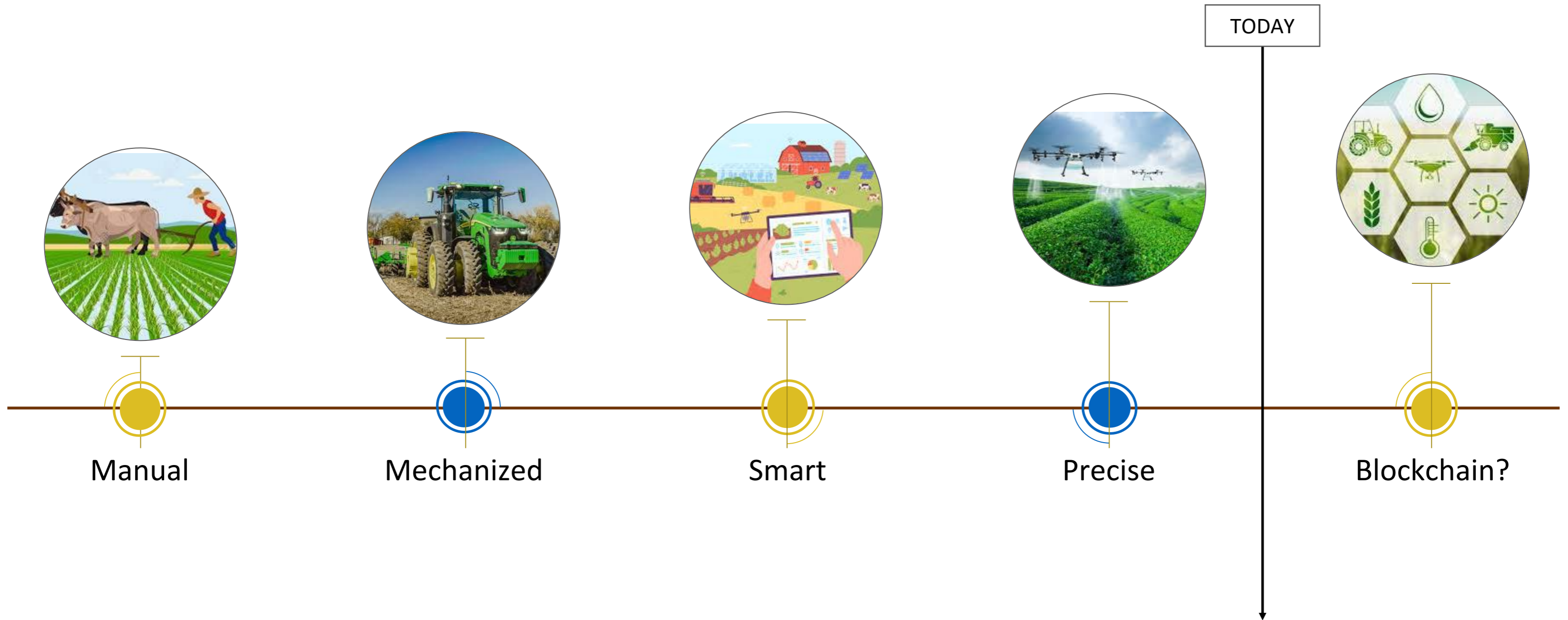
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Centaur Analytics, Inc.



Evolution of Agriculture



The Landscape of Agricultural Insurance

Indemnity-Based Insurance



Index-Based (Parametric) Insurance



Limitations



Manual Inspections



Time Delays



Data Scarcity

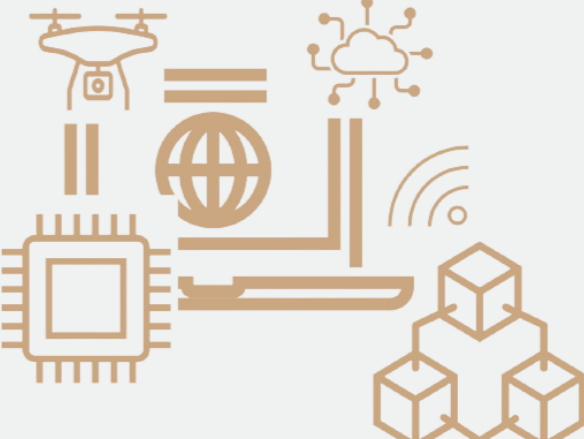
The Need for a Paradigm Shift



CLIMATE CHANGE

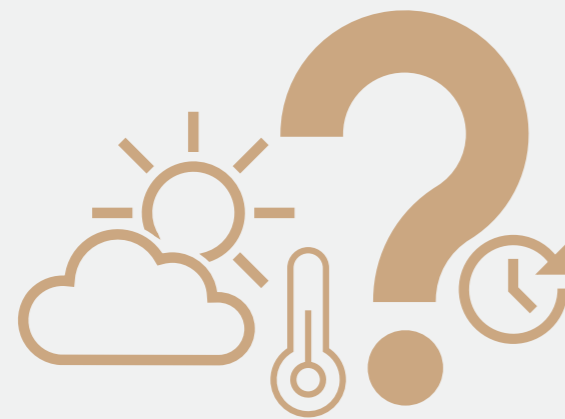


DEMAND FOR SUSTAINABILITY



TECHNOLOGICAL ADVANCEMENTS

Enter AI



**WEATHER
PREDICTION**



**DISEASE
DETECTION**



**TREND
ANALYSIS**

Internet of Things (IoT) - A Game Changer



Real-time data

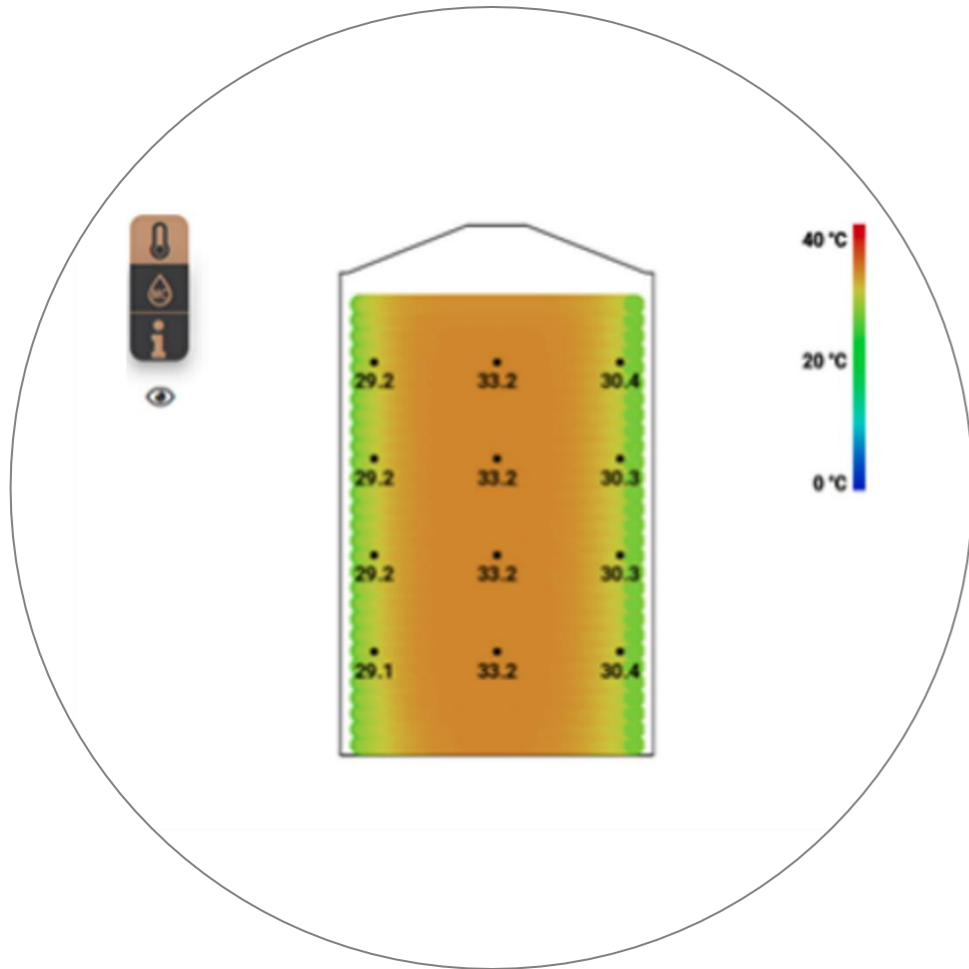


Plethora of Sensors

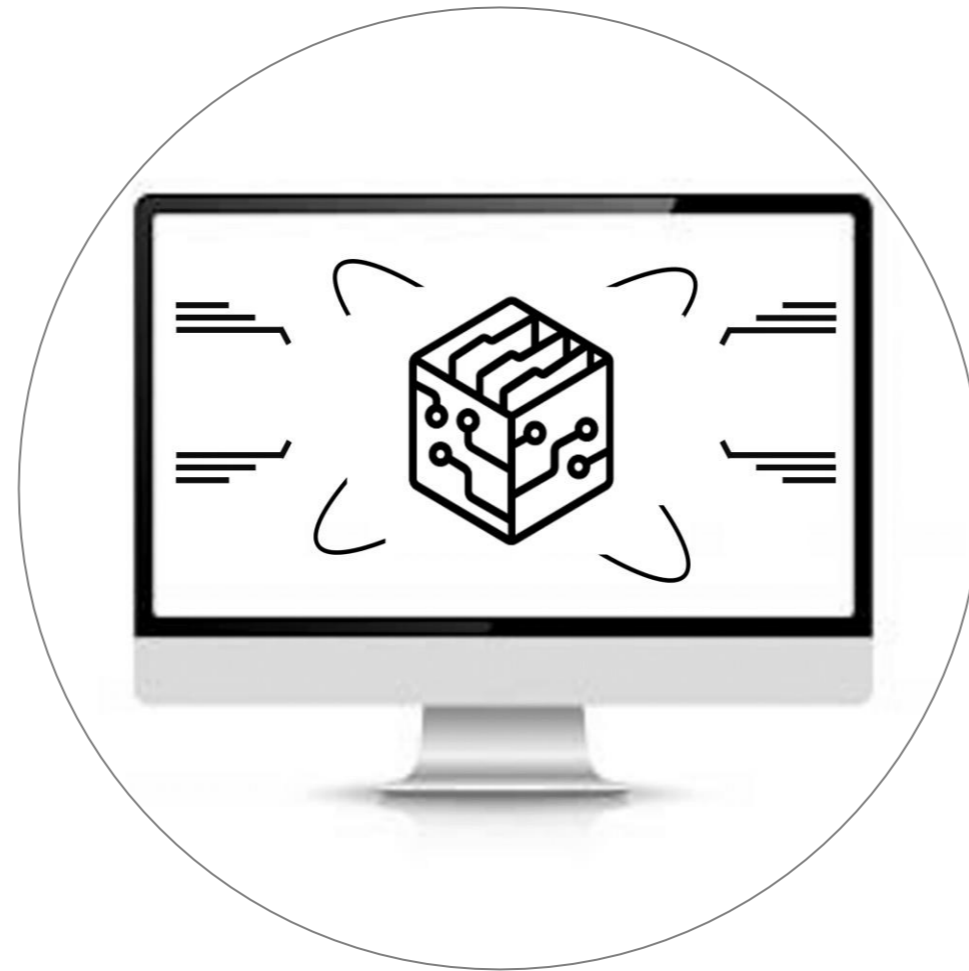


Connectivity

The Concept of Digital Twins



Virtual Replica



Scenario Simulation



Prediction Accuracy

Case Study 1: Predictive Analysis for Crop Diseases



- *Traditional vs. AI*
- *Impact*

**source: Taranis.ag*

Case Study 2: Post-Harvest Risk Mitigation



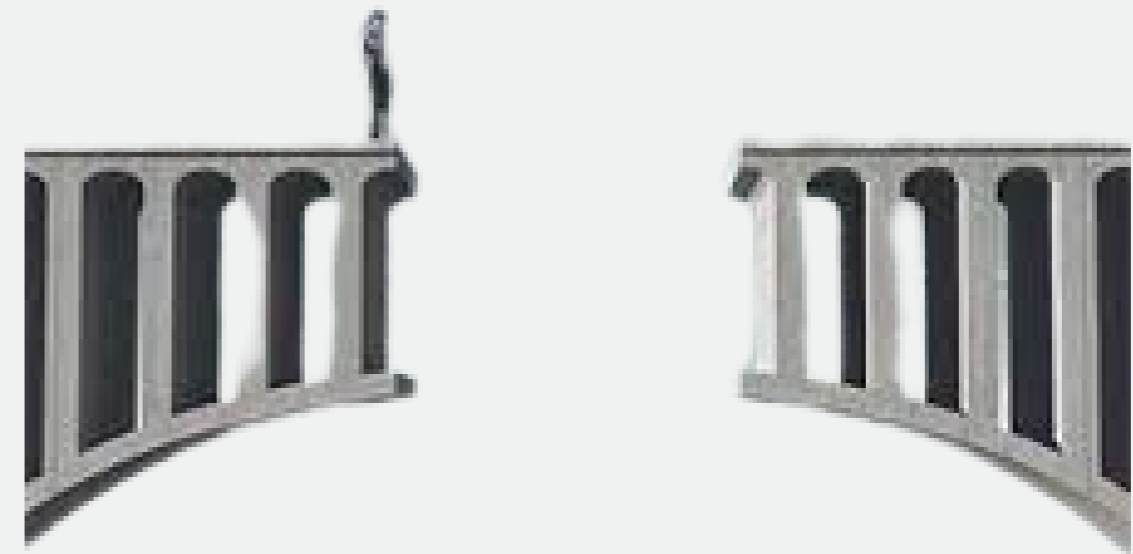
Case Study 3: Cargo Risk Modeling and Mitigation



Explainable AI - Trust in Technology



**IMPORTANCE OF
INTERPRETABILITY**



**BRIDGING THE
TRUST GAP**

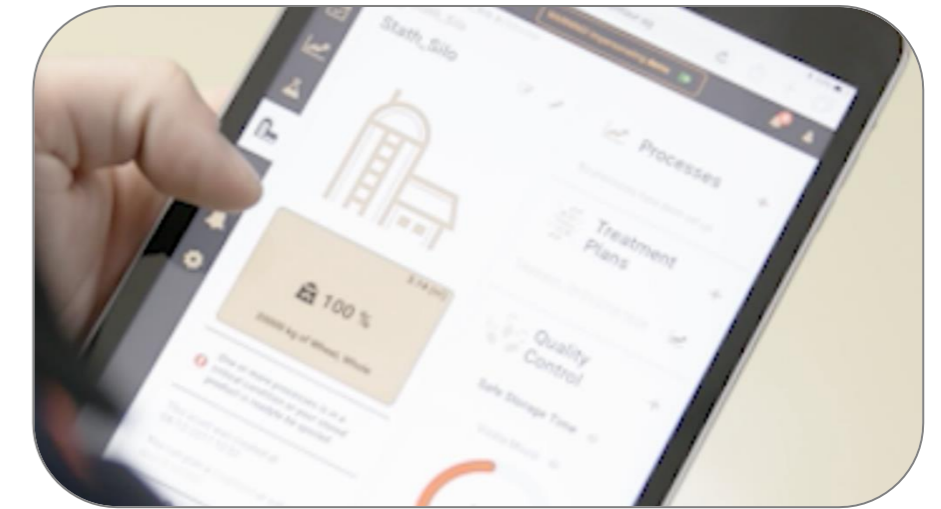
Transformative Impact on Risk Evaluation



Dynamic Premiums
(real time, too?)



AI-Driven Risk Segments



Client at the Helm

Recommendations



Technology Partnerships



Predictive Data Approach



**Sustainability
Metrics**



Thank you

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