



Optimierung der Wertschöpfungskette mit DeepTech

Philipp Rathjen
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Deep Tech

Vereinfachte Begriffseingrenzung – Tech wird “deep”



Deep Tech in einer vernetzten Landwirtschaft

KIREAP Technology Integration

**Künstliche
Intelligenz**



**Entscheidungen
Prognosen**

**Satelliten
Drohnen
Sensorik**



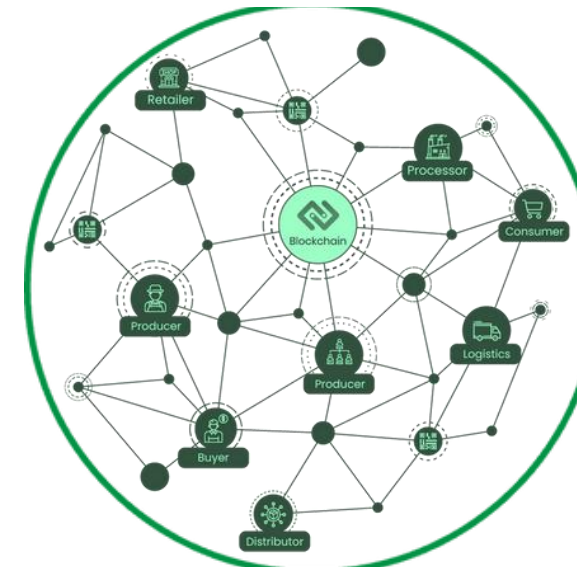
**Daten
Integration**

**Autonome
Systeme**



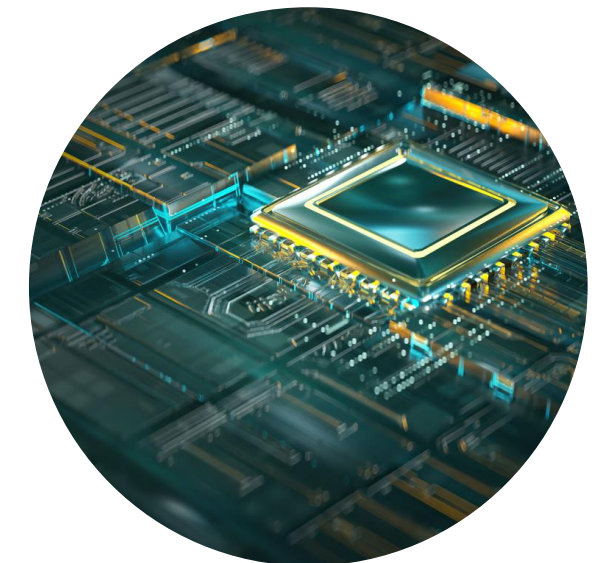
**Arbeitsintensive
Aufgaben**

**Blockchain
Tokenization**



**Transparenz
Vertrauen**

**Quanten
Computing**



**Echtzeit
Daten-
verarbeitung**

Intelligente Landwirtschaft

KIREAP Field Intelligence - Wachstumsprognosen und Steuerung autonomer Systeme (Drohnen und Roboter)



Empowerment

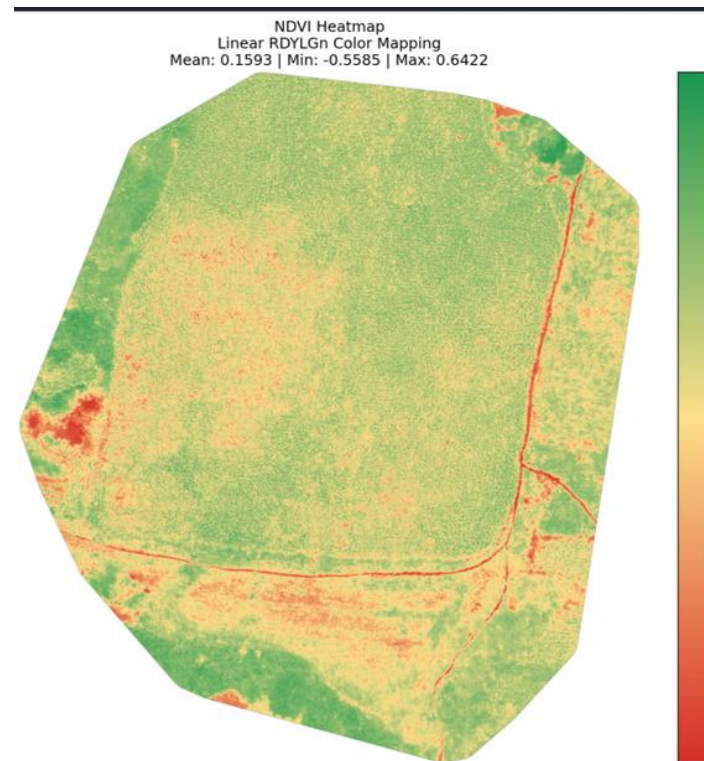


Regeneratives
Systems

Sensorik
Überwachung

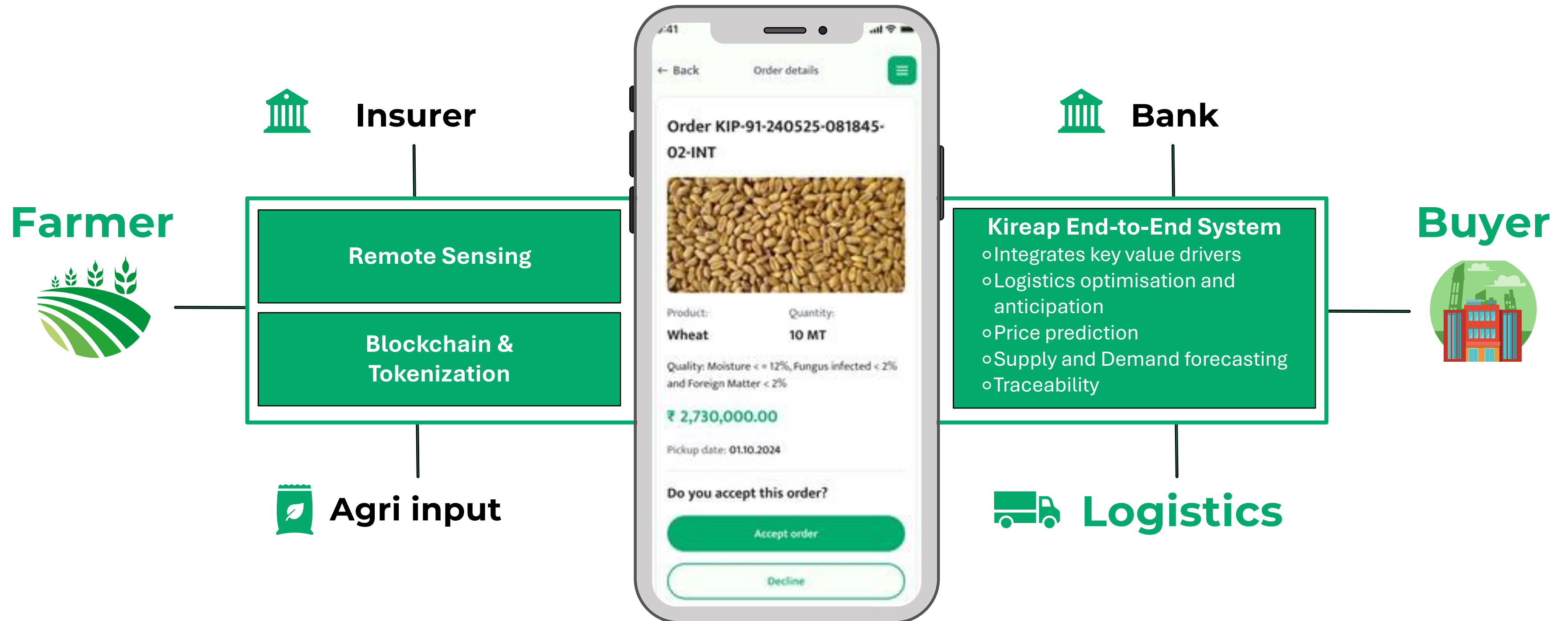
ML-basierte
Prognose

Autonomes
Handeln



Intelligente Vernetzung des Ökosystems

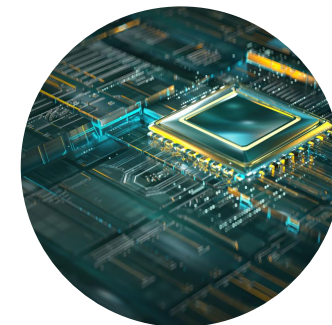
KIREAP cloud-basiertes System vernetzt Marktteilehmer
Planungssicherheit und Anpassungsgeschwindigkeit



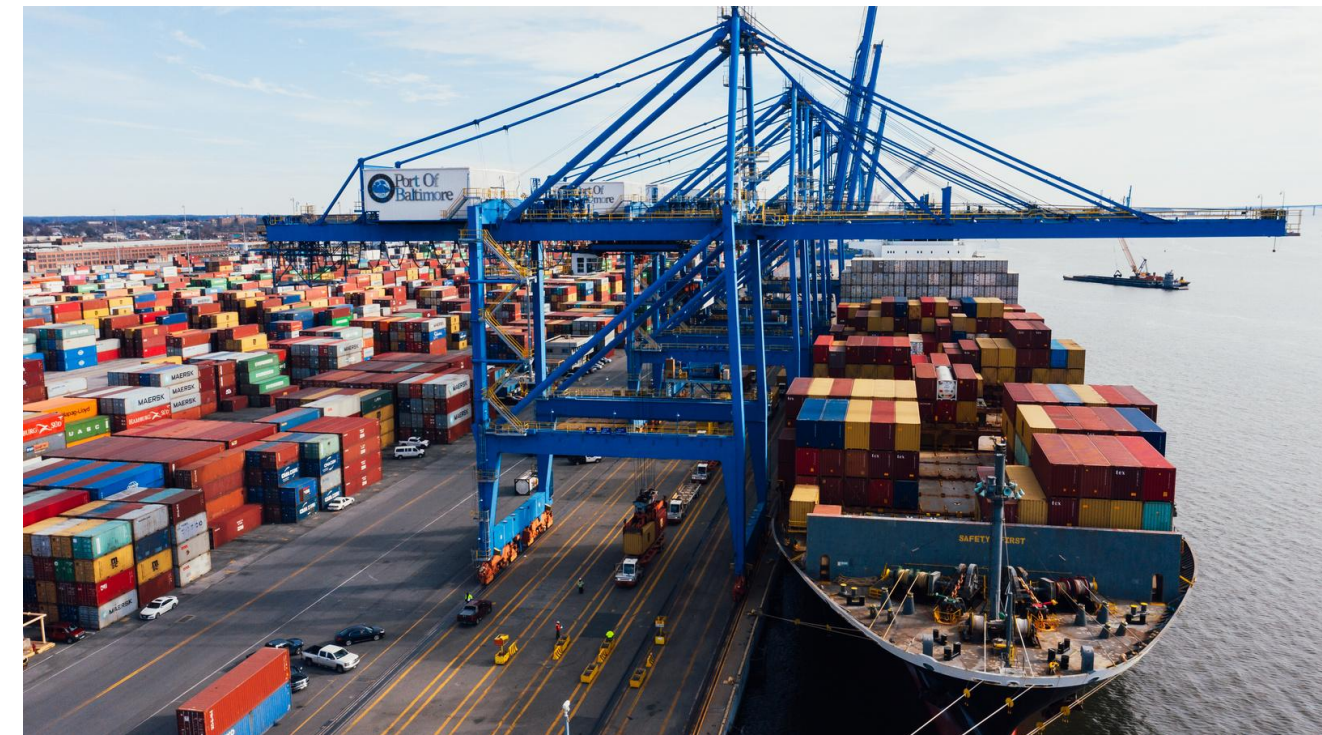
Herausforderung: Daten in Echtzeit und Präzision

Quantum-Inspired Optimization - Quantum Readiness

Quantum-inspired
Data Fusion / Sensors



Quantum-inspired
Logistic Algorithm



KIREAP - Enable Intelligent Ecosystems

Bayern profitiert von vernetzten Systemen



- **Profit:** Höhere Effizienz
- **Planet:** Reduktion von Dünger, Co2, Lebensmittelverschwendung
- **People:** Stärkung kleinerer und mittelständischer Strukturen

KIREAP

THANK YOU

philipp.rathjen@kireap.com
www.kireap.com



KIREAP Tech for Good

Uplifting Small holding Farmers (Example India)



15,000

Farmers on platform

+5%

Selected Farmers | margin increase

-2%

reduction in buyer costs

KIREAP
Farmer



KIREAP
Offtaker



KIREAP
Logistic

“

- Everything automated
- Advance payment received for the first time
- Higher profits help me invest in better equipment and education for children

”

- Effortless and lower cost
- Highly efficient and professional
- Helps me to prove my carbon reduction goals

- Automatic order creation
- Pick-up location and routes on my system
- Just like UBER for grain

BackUp



Farm Overview

Gesamtfläche der Farm

247

Hektar über 5 Parzellen

↗ Keine Änderung

Durchschnittlicher Gesundheitswert

87%

Ausgezeichneter Zustand

↗ +5% diese Woche

Wassereffizienz

92%

Optimaler Verbrauch

↗ +2% diesen Monat

Aktive Warnungen

3

Erfordert Aufmerksamkeit

↗ -2 seit gestern

My Farm Plots

3 active plots

North Field A

45.2 hectares

Section A1

PFLANZENART

Wheat

AUSSAATDATUM

March 15, 2024

Gesundheitswert

89%

NDVI-Index

0.78

Wasserstress

Low

Nährstoffe

excellent

Details anzeigen

South Field B

38.7 hectares

Section B2

PFLANZENART

Corn

AUSSAATDATUM

April 2, 2024

Gesundheitswert

72%

NDVI-Index

0.65

Wasserstress

Medium

Nährstoffe

good

Details anzeigen

Wetter & Vorhersage

Farm Location, Region

24°C

Teilweise bewölkt

68%

12 km/h

5-Tage-Vorhersage

Sonnig	Teilweise bewölkt	Wed	Thu	Fri
26° 18°	28° 20° 10%	22° 16° 85%	24° 17° 20%	27° 19° 5%

Warnungen

Warnung

Heavy rainfall expected Wednesday - Consider protective measures for crops



Analyse Typ

Plant Health

Scan-Zeitleiste

< Jun 6 >

Jun 6 Jun 11 Jun 16 Jun 21 Jul 1

- ☒ Overlay anzeigen
- ☒ Probleme anzeigen (3)

Analyse Typ: Plant Health
Scan-Datum: Jun 6

Legende

- Problem Standort
- Ausgewähltes Problem
- Analyse-Overlay
- Betroffenes Gebiet

Wetter

Jun 6, 2025



26°C

Rain, Partially Cloudy

H: 29°

L: 22°



61.6%

Luftfeuchtigkeit



22 km/h

SW Wind



14 km

Sichtweite



1012 mb

Luftdruck



Niederschlag

0.3 mm

100% Chance

Visual Crossing Wetter



Kireap Bot

● Online

Hello! I'm Kireap Bot. How can I help you with your farm today?



12:12 PM

how is my crop health today for plot-abc

12:12 PM

Your crop health for Plot-ABC looks great today — the plants are showing strong growth with no major stress detected! 🌱



12:12 PM

When should i harvest

12:13 PM

Based on the current growth rate and sowing date, optimal harvest time is estimated to be in 12-14 days.



12:13 PM

Werte für Alle

Daten-Nutzer im KIREAP Ökosystem



Farmer

AI-powered actionable insights to increase yield and quality, higher revenues, real-time payment, incentives for premium quality, and instant digitized quality checks.



Purchaser

Lower costs, guaranteed quality via digitized quality checks, full traceability across the value chain, improved ESG outcomes.



Logistics

Optimized resource movement and real-time data to streamline operations and reduce inefficiencies.



Enablers

- Governments gain reliable data for food security and rural development
- Banks can reduce credit risk
- Agriculture Input Providers optimize supply and prices
- Insurers can improve risk assessment and coverage

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