

# Agriculture

Modernize workflows from farm to fork to optimize operations, increase profits and reduce risk



Powering agriculture from farm to fork

### Overview

Unprecedented volatility in agriculture markets is driving digital transformation across the agriculture value chain. Pressure to increase operational efficiency, decrease reaction times, and forge stronger relationships with trading partners is at an all-time high. Agriculture companies are adopting digitalization to increase flexibility and market responsiveness, improve collaboration across the ecosystem, reduce risk and decrease costs.

#### **Resource constraints**

Climate change and extreme weather events, population growth and urbanization are reducing the amount of arable land available to farmers. Water scarcity is impacting regions across the globe. Farmers must maximize yield from each acre of land, consuming the least amount of resources to produce more output.

#### Collaboration

Both buyers and growers want to make the best possible deals, but often they cannot negotiate directly in real time. They spend hours, days and even weeks on paperwork, email messages, and never-ending phone calls. Agriculture business managers spend a lot of their time with farmers answering questions related to contracts, invoicing, ticketing and more.

#### Complex supply chains

Managing end-to-end movement of goods from farm to silos to shipping to storage and delivery is complicated.

Extreme weather events, changing geopolitical situations, pandemics, and social unrest wreak havoc on supply chains. Agriculture companies must assess and react to supply chain disruptions in real time to ensure crops are not lost.

#### Rapidly changing markets

Agriculture markets are constantly shifting. Consumers preferences change with the latest fad diets, medical research, health news, and population growth. Increased demand for biofuels also drives demand for feed crops like sugar and corn. Agriculture companies need real-time awareness and the ability to rapidly pivot when markets shift.

#### **Traceability**

Agriculture regulations must be strictly adhered to, particularly for speciality premium crops such as organic, free range, and non-GMO. These products must be carefully traced to ensure they are compliant with all regulations to command a premium price.

#### Financial risk and compliance

Agriculture farmers and buyers must ensure a complete audit trail of trading and finance and ensure regulatory compliance across geographies and borders.

#### **Cost management**

Costs for inputs – from seeds to fertilizer to, in some cases, water – are increasing. Farmers and buyers must decrease costs as much as possible, using advanced analytics to evaluate which crops to grow, when to start planting, and automating wherever possible to eliminate manual processes, reduce wasted time, and gain accuracy.



### Eka Cloud Platform

Eka's platform for trading and risk, financial management and supply chain helps agriculture companies optimize business processes, gain efficiency and explore new opportunities.

# Extend your value chain data with powerful enterprise applications

Unlock the value of your data from sourcing to trading and risk, supply chain and financial management with 50+ mobile applications.

#### Analytics for better visibility and faster decisions

Perform on demand analysis using trusted data with custom dashboards, drill downs, visualizations and embedded machine learning algorithms for anomaly detection.

#### Automate business processes faster

One platform makes it easier to transform complex processes into applications. Built-in schedulers, workflow engine and custom applications help drive productivity.

#### Integrate data and systems

20+ built-in connectors and open APIs enable you to easily bring external data from ERP systems and other sources including market, weather, compliance and your database.





Single open cloud platform



Low code/no code automation



Common data model



Role based data-driven insights



Mobile engagement, access everywhere

#### Security

Eka's platform complies with industry standard security guidelines, including SOC 2 Type I, SOC 2 Type II and GDPR. It has single sign-on via industry standard authentication protocols, encryption of data in transit and at REST, and is integrated with best-inclass DLP, EMM and archival partners. It has been validated under Veracode Verified Standard status.

## Collaborate with blockchain

The coffee industry relies on farmers on small farms hand picking beans to sell to local middlemen and buyers. This inefficient process affects profits for farmers and buyers.

The Coffee Board of India teamed up with Eka to develop a digital marketplace for famers and buyers to collaborate directly, removing several steps in the coffee trading supply chain.

The gains in efficiency deliver better profits for farmers and buyers. Eka's Blockchain Marketplace ensures transparency, traceability and security, critical factors for this application.

By expanding market reach, the app provides the possibility for farmers to switch to the more lucrative yet niche Arabica coffee crop which yields a 140% increase in profits.

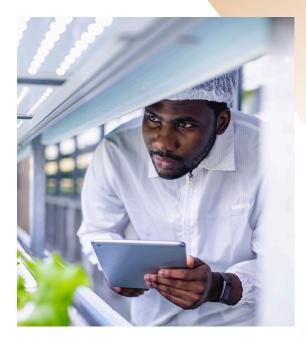


# Digitize for speed and agility

Prior to working with Eka, the REG team relied on multiple spreadsheets to record market positions across its source crop and energy assets. Consolidating all these spreadsheets into a single view for decision-making would take 4 days to complete.

They implemented Eka's Position and Mark to Market application. On launch, it ran in parallel with the existing manual reporting process. As the two systems ran concurrently, errors created in the spreadsheet process were revealed – errors that did not happen with Eka's automated, more accurate system.

The calculation of market position now takes 30 seconds, so the REG team knows their market position across both the crop and energy markets immediately and can make decisions accordingly.



# Key applications for agriculture

Eka's agriculture solutions deliver the functionality you need to solve your most pressing commodity management challenges. Improve crop yield, collaborate more effectively, improve risk management and automate processes to increase operational efficiency. Simply choose the application you need and experience ROI in weeks. It's fast, easy, and cost-effective. Evaluate product demonstrations, install your apps and receive training remotely, ensuring your business thrives in the most challenging environments.



#### **Physical Trades**

Manage multi-product, multi-grade, multilocation contracts. Manage price exposure in real time. Plan and track all tasks with workflow management.



#### **Farmer Connect**

Engage directly with multiple farmers. Perform multiple rounds of negotiations in real time. Manage payments, contracts and invoices digitally.



#### **Yield Forecast**

Predict farm yield considering weather forecasts and planned farm inputs. Plan the best crop planting mix and farm inputs to optimize yield.



#### **Credit Risk**

Control counterparty risks and potential credit incidents before they occur with complete visibility into credit utilization and potential breaches.



#### **Derivatives**

Get end-to-end management of exchange traded and OTC derivative contracts in one system for better hedging and speculation.



#### Operations

Control bulk stock with efficient planning and scheduling. Drive efficiency and profits with enhanced logistics management and schedule management.



#### Disease Identification

Identify plant health. Click an image of the plant and upload it on the application and evaluate its health using machine learning algorithms.



#### Traceability

Trace crop origins from farm to fork with blockchain. Gain transparency into crop movement and track crops as they move through the value chain.



#### P&L Explained

Identify root causes in P&L. Drill into individual transactions, spot faulty assumptions, measure the performances of traders, books and businesses.



#### Position and Mark to Market

Analyze position and exposure for a consolidated, real-time view of position using data from excel sheets, broker statements, CTRM systems and more.



#### VAR

Consolidate data from disparate sources, including CTRM, spreadsheets, and market data, for an accurate view of risk. Compute VAR on portfolios.



#### Logistics Operations Analysis

Track goods movements with delays and deviations. Analyze key performance indicators by logistics company, route, origin, destination, and more.



#### **Procurement Analysis**

Track, monitor, analyze, and manage all enterprise-wide spends. Simulate projected spend and perform detailed spend attribution analyses.



#### **Hedge Accounting**

Simplify complex calculations across the supply chain – quality, weights, taxes, costs, levies and royalties. Avoid cash flow problems.



#### **Risk Monitoring**

Define risk limit policies, analyze global risk across multiple portfolios and books, and track limit breaches and utilizations.

25,000+

Farmers supported

10m+

Tons of inventory moved

\$100m+

Payments processed each week





To learn about how Eka can add value to your operations.

www.eka1.com info@eka1.com









### **About Eka Software Solutions**

Eka Software Solutions is a global leader in providing digital solutions for Trading & Risk, Supply Chain Management and Financial Services driven by Cloud, Blockchain, Machine Learning and Analytics. The company's best-of-breed solutions serve the entire trading value chain across agriculture, energy, metals and mining and manufacturing markets.

Eka's Cloud Platform provides advanced analytics, one source of data and an automation engine, providing maximum flexibility and investment protection as business needs and market requirements change. Eka is committed to ensuring its 100+ clients can work from anywhere and collaborate across ecosystems within a secure and trusted environment.

For more information, visit www.eka1.com and follow us on LinkedIn and on Twitter.