



How Unitrans Reimagined Sugarcane Field Inspections through Custom Technology

Case study / Agriculture
15 Min read

Across some of Africa's most remote sugarcane operations, Unitrans is redefining agricultural logistics through tailored, tech-enabled solutions. By integrating a custom app solution into pre-field inspections, we've transformed how field data is captured, shared, and actioned - delivering efficiency, safety, and smarter decision-making where it's needed most.

The Challenge: Bridging the Gap Between Distance and Decision-Making

In vast and disconnected rural areas, sugarcane logistics often suffer from outdated manual processes and limited connectivity – slowing down operations and introducing unnecessary risk.

Key challenges included:

- Connectivity gaps delaying the flow of critical data
- Manual inspections prone to inefficiencies and errors
- Inconsistent field reporting hindering proactive management
- Incomplete safety insights increasing operational risk



The Unitrans Solution

1 Digitised, Offline-Ready Inspections Using the App

To address these gaps, Unitrans deployed the custom mobile app designed for offline functionality and capable of capturing up to 50 data points per inspection. This ensured that even in areas with no mobile signal, teams could collect, store, and sync comprehensive field data without delays or disruption.

Key improvements included:

- Offline data capture eliminating lag in remote regions
- Standardised digital checklists improving accuracy and consistency
- Geo-tagged photo uploads elevating safety visibility
- Digitised and visualised critical data which enhanced the speed and quality of decision making
- Enabled clear year-on-year comparison of in-field conditions, changes and improvements
- Indirect cost savings
- A reduction in carbon footprint through a paperless system being used to capture information

"Before Device Magic, we were always chasing paper trails. Now we're planning ahead."

- Unitrans Operations Lead



The Results

Proactive Field Planning

Teams now receive real-time updates on conditions such as terrain challenges, irrigation faults, or weed outbreaks - allowing resources to be allocated before issues escalate.

A reduction in operational delays

Faster, Data-Driven Decision-Making. Digital inspections enable earlier interventions, smarter deployment, and reduced need for rework or repeat visits.

Safety incidents dropped by 43,5%

In-field roll-over was significantly reduced between 2023 and 2025.

Transparent, Collaborative Client Engagement

Real-time reporting gives clients visibility into field conditions, improving responsiveness and strengthening trust.

A reduction in time spent on field intervention

Enhanced Safety Compliance. Hazards like uneven roads, slippery and wet surfaces and poor visibility due to dust are now consistently logged and shared - raising safety standards across every field team.

Reimagining Agricultural Growth, One Field at a Time.

With Device Magic as a critical tool in its broader precision agriculture strategy, Unitrans is enabling smarter, safer, and more connected sugarcane logistics. From capturing over 100 field-level factors to conducting post-season reviews that inform long-term planning, we're closing the gap between challenge and opportunity – delivering sustainable growth where others see obstacles.

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growth in Agriculture



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Innovation That Fuels Growth

What ties these solutions together is Unitrans' commitment to scalable, data-driven transformation in agriculture. Whether applying fertiliser or cutting cane, real-time insights and smart automation are empowering producers to grow more with precision.

This is innovation that unlocks the potential of the land. This is growth, reimagined.