

final report

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Increased adoption of eNVDs through an API between Optio software and eNVD

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Executive summary

Australia's livestock industry plays a critical role in the national economy, and the industry's continued growth and reputation depend on the integrity and traceability of livestock movement. The Integrity Systems Company (ISC) has developed electronic National Vendor Declarations (eNVDs) as a key component of the Livestock Production Assurance (LPA) program to ensure data integrity, ease of use, and enhanced traceability within the livestock supply chain.

However, despite the benefits of eNVDs—including reduced paperwork and data accuracy—adoption remains below its potential. Many livestock producers and processors continue to rely on traditional paper-based NVDs, slowing the transition to a fully digital system. This project addressed these challenges by developing an API integration to the ISC eNVD database, facilitating easier and more efficient use of eNVDs within the processing sector and encouraging adoption by livestock producers.

Optio is a modular software suite which provides decision support tools and functionality to improve red meat processing plants processes while also providing insights and feedback. Processing plants requested Optio to help support the transition to eNVDs. Currently the handling of NVD's is difficult with manual and electronic NVD's creating inefficiencies across the supply chain. For Optio to support the handling of all the eNVDs an API was required between Optio and eNVD. Further to this, integration of Optio systems (including the new eNVD connection to ISC's eNVD database) to processor operational MES systems was also achieved. On-site workshops with processors highlighted some technology enhancements that enable the allocation of multi-order eNVD data to multiple livestock orders for traceability, feedback and invoicing purposes.

The API enabled the automation of the following processes:

1. **Data Entry and Verification:** By allowing processors to directly validate, and retrieve eNVDs from the eNVD database, the API will reduce manual data entry, enhance traceability, and improve accuracy.
2. **Data Sync Across Supply Chain Members:** Automatic syncing of eNVD data with meat processing companies will provide a single, consistent source of truth, ensuring that data is accurate and up to date.
3. **User Notifications and Alerts:** Notifications and reminders can be set up to inform processors and suppliers of pending or required actions, reducing delays in documentation and compliance.

Training materials were developed on how to use eNVD functionality for processing plant staff and a FAQ guide. In partnership with processors, extension materials were disseminated by livestock buyers and processing plants to educate livestock producers on the benefits of using eNVDs for the supply chain.

The adoption of digital systems and on plant process change doesn't happen in isolation but within the plant ecosystem of producers, suppliers, services providers, QA systems, on plant veterinarians, and regulatory requirements, in addition to job roles and responsibilities changing for staff within a processing plant. Facilitating change within an ecosystem requires a culture where change is managed and implementation is planned and supported.

Through this project supply chains and service providers have started collaborating to enact change across the entire supply chain resulting in a 9.8% uptake in creating of eNVDs and 100% increase in processing plants using eNVDs within their daily operations.