

Digitising State Cross-Border Inspections:

A Collaborative Pathway to Efficiency, Compliance, and Enhanced Inter-State Trade

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Cross-border inspections are a cornerstone of biosecurity protection, safeguarding our ecosystems and agricultural industries. However, the traditional processes are often characterised by inefficiencies that impact both private sector operators and government regulators. Issues such as missing or inaccurate documentation, inconsistent protocol interpretation, and cumbersome manual processes lead to delays, increased costs, and potential risks. This article explores how digitising the cross-border inspection process offers a transformative pathway towards greater efficiency, stronger compliance, and enhanced trade facilitation, benefiting all stakeholders.

Challenges and the Imperative for Digital Solutions

For the Private Sector:

Businesses involved in cross-border trade frequently encounter obstacles that hinder their operations and profitability. These include:

- **Delays and Spoilage:** Missing paperwork or discrepancies often result in shipment delays, which can be particularly detrimental for perishable goods like berries, leading to spoilage and financial losses.
- **Increased Costs:** Inefficiencies in the inspection process translate to higher operational costs for businesses due to delays, storage fees, and potential rejection of goods.
- **Uncertainty and Planning Difficulties:** Inconsistent application of regulations and lack of real-time visibility into the inspection process create uncertainty, making it difficult for businesses to plan their logistics and supply chains effectively.

For Government Regulators:

Government agencies responsible for border control and biosecurity face their own set of challenges which include:

- **Resource Constraints:** Manual inspections take a lot of time and people power. Digital tools can lighten the load, helping teams work more efficiently and make better use of their resources.
- **Enforcement Challenges:** Keeping up with complex regulations can be tough when relying on paper-based systems. Digital platforms make life easier by improving traceability, accuracy, and record-keeping, making compliance and audits more straightforward.
- **Maintaining Biosecurity Standards:** Striking the right balance between smooth trade and strong biosecurity standards is always a challenge. Digital tools can help by supporting better risk assessment and more targeted responses, making biosecurity efforts more effective and more efficient.

A Collaborative Approach: Digital Tools and Real-Time Data Exchange

A recent multi-party initiative demonstrated the transformative potential of digitising the cross-border inspection process through collaboration between private sector entities, government bodies and Australian traceability provider, FreshChain Systems.

The traceability pilot project used a collaborative, iterative approach to develop and validate digital tools integrated into an existing web-based platform. It aimed to resolve many of the issues with traditional paper-based inspections for cross border trade (e.g., missing documents, errors, split consignments).

This project focused on:

Developing and Deploying Digital Tools

FreshChain Systems created digital tools to streamline pre-shipment processes, facilitate real-time data exchange, and automate documentation.

Tools included:

- Pre-shipment checklist for private sector
- Remedial tools at the inspection stage
- Automated SMS messaging to all involved supply chain partners
- Digital paper trails accessible to all supply chain partners

Enhancing Traceability and Data Accuracy

Technologies such as 2D barcodes and serialisation were used to link data across the supply chain, from production to inspection, improving traceability and reducing errors. The industry partner printed and applied serialised 2D GS1 Digital Link QR codes at the punnet, tray, and pallet level, which provided full traceability and allowed plant health and consignment notes to be traced back to the punnet level. They digitised all food safety certifications, pre-shipment treatment notes, and consignment notes.

Testing and Validation

The effectiveness of these digital tools was rigorously tested in real-world scenarios, with a focus on addressing common pain points in the inspection process. A pilot shipment of raspberries was sent from Corindi, NSW, to Perth/Canning Vale, WA, for inspection

by WA Biosecurity (DPIRD). Transport was via road and inspection conducted at the WA Farm Direct depot. Once the shipment reached the inspection point, DPIRD was able to log into the FreshChain RegTech platform and access all the shipment information uploaded by the industry partner. Once DPIRD completed the inspection process, they uploaded the results to the RegTech portal, automatically notifying all supply chain partners via SMS.

Key Outcomes and Benefits

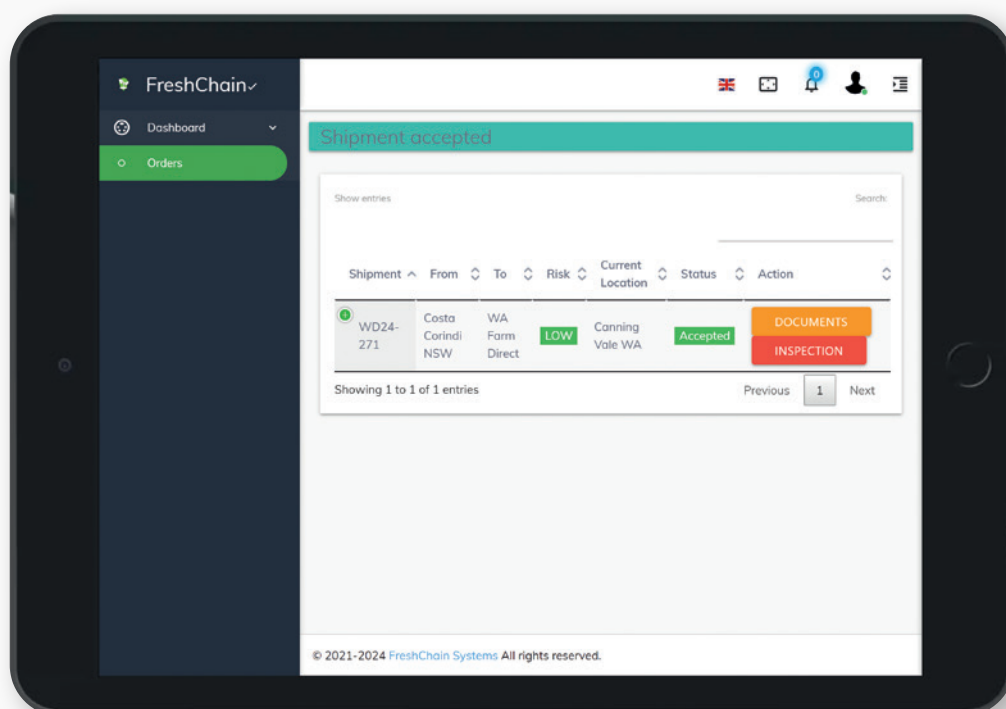
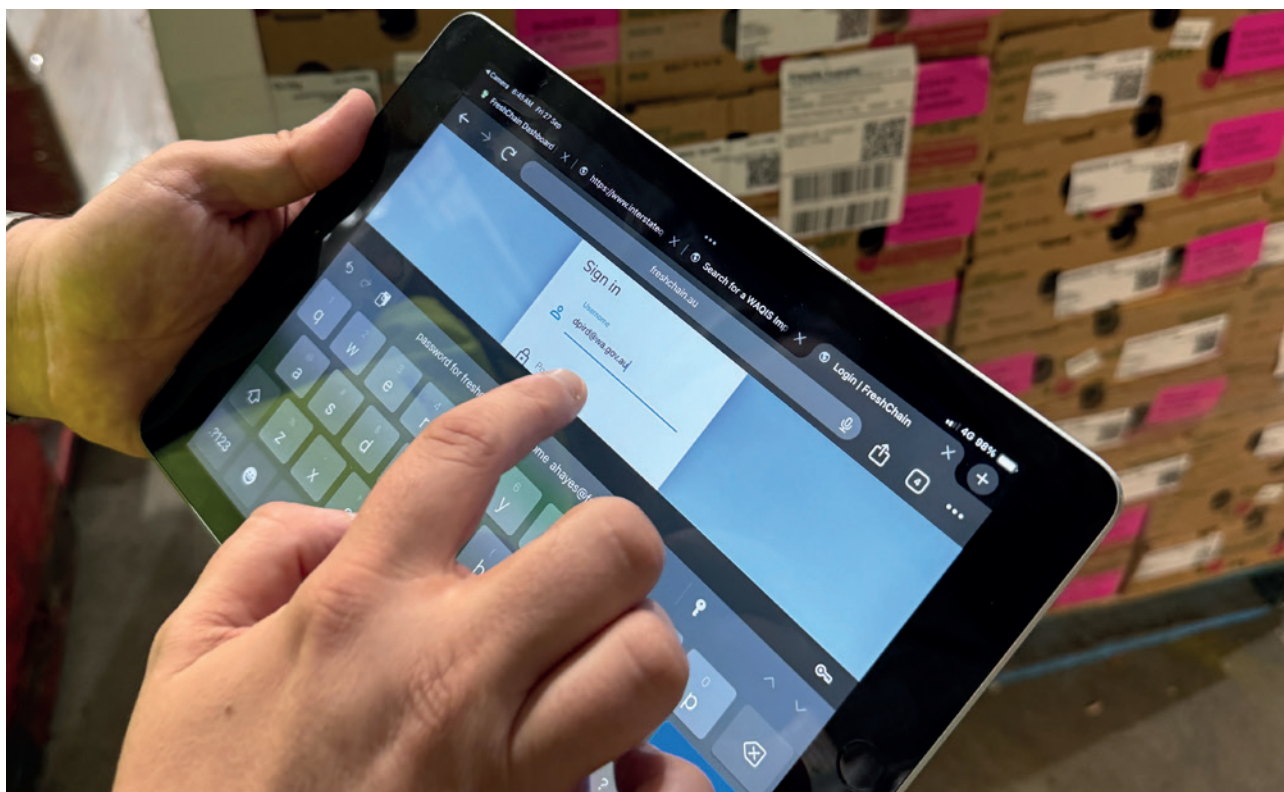
The trial highlighted significant benefits for both the private sector and government regulatory sectors:

For the Private Sector

- **Reduced Delays and Costs:** By addressing issues like missing paperwork and documentation errors, digital tools can significantly reduce delays and the associated costs, improving the efficiency of cross-border trade.
- **Improved Predictability and Planning:** Real-time data exchange and increased transparency in the inspection process provide businesses with greater predictability, enabling better planning and the optimisation of supply chains.
- **Streamlined Operations:** Digital solutions can automate many manual tasks, reducing the administrative burden and streamlining overall operations for businesses involved in cross-border trade.

For Government Regulators:

- **Enhanced Efficiency and Resource Optimisation:** Digital tools can automate processes, reduce paperwork, and enable risk-based assessments, allowing regulatory agencies to optimise their own resource allocation and improve the efficiency of inspections.
- **Strengthened Compliance and Enforcement:** Improved traceability, data accuracy, and auditability enhance the ability of regulatory agencies to monitor and enforce compliance with biosecurity and other regulations.
- **Data-Driven Decision-Making:** Digital platforms provide valuable data and insights into trade flows and potential risks, enabling regulatory agencies to make more informed and effective decisions regarding border control and biosecurity.



The system can be access via any internet-connected device and is optimised for use on tablets as well as desktop systems Photo credit: FreshChain Systems

A Collaborative Path Forward

Realising the full potential of digital transformation in cross-border inspections requires a collaborative effort between the private sector and government regulatory sectors.

This includes:

- **Data Sharing and Collaboration:** Establishing agreements and mechanisms for secure data sharing between supply chain partners and regulatory agencies is crucial for enabling real-time visibility and efficient information flow.
- **Standardisation and Interoperability:** Adopting global data standards and ensuring interoperability between different systems is essential for seamless data exchange and effective communication across borders.
- **Regulatory Adaptation:** Government regulatory sectors may need to adapt existing regulations and processes to fully leverage the benefits of digital technologies while maintaining necessary oversight and control.
- **Investment and Implementation:** Continued investment in the development and implementation of digital solutions, along with training and capacity building, is essential for driving widespread adoption and maximising impact.

The ultimate goal is to create a kind of national “green pass” for fresh produce, so trusted growers and packers can move their products more easily based on their low-risk track record. By using smart digital tools in packhouses before products are shipped, we can help catch issues early and reduce inspection failures. If something does go wrong, those same tools can quickly share information in real time so action can be taken fast.

It also means inspectors can focus more on higher-risk shipments, while still keeping strong biosecurity in place to protect the whole industry.

By embracing digital transformation and fostering collaboration, both the private sector and government regulatory departments can work together to create a more efficient, secure, and prosperous future for cross-border trade.

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To learn more about this work or to participate in Phase 2 please contact Greg Calvert:

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Hear more about this subject from Greg by listening to his BerryQuest 2025 talk
“Unpacking the Findings of Two Recent Berry Trials to Improve Traceability, Consumer Engagement, and the Cross-Border Inspection Process”
at bit.ly/BQI25-GC




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