

Why Traceability Matters in the Supply Chain

WHITEPAPER



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Introduction

Australia's supply chain faces the challenge of servicing a digitally native consumer base that's become accustomed to the expedited delivery of their products. With 98% of trade¹ reliant on shipping products overseas, the traceability of goods is more important than ever for Australian organisations looking to keep pace.

The level of detail needed to keep track of products, including where they are and if they need to be recalled, is causing a lot of pressure on supply chains. This often leads to juggling different monitoring platforms, data silos, and spreadsheets that make it very confusing for end users - increasing the risk of human error. Bringing all this information together would help, but many business owners or managers feel they don't have the time to move their overburdened architecture to a more cohesive or centralised system.



Traceability is an essential element of supply chain efficiency for businesses both big and small. No organisation is exempt from the vulnerabilities associated with these complex processes. The Australian agriculture industry — one of the largest export industries in Oceania — is subject to \$2 billion in food fraud each year.² This criminal interference leaves operators responsible for restocking down chain retailers and attempting to maintain customer loyalty amid significant revenue loss.

Effective monitoring processes may serve to mitigate these risks. Real-time tracking can help businesses adjust to disruptions faster. If a product is damaged at some point in the delivery process, for example, the location and reason for the issue can be identified. The product can be replaced to ensure the customer doesn't open their front door to find a defective item has been delivered.

Without a clear line of sight into where accidents occur, even the largest of companies are subject to challenges resulting from the blind spots in their supply chain.

It's not just the producers who feel the burden: Today's consumers want to know where their food and other products are coming from.

Therefore, increased transparency along the supply chain has value for all parties involved in distribution from end to end.

Businesses wanting to manage increasingly complex operations are turning to digital solutions that can monitor and update their tracking platforms. This level of traceability gives companies the ability to follow products and goods as they move along the supply chain and exact information about the provenance of inputs, supplier sourcing practices and conversion processes.³

Deploying software infrastructure that can receive and update inventory management data in real-time is only half the battle. Implementing hardware devices that carry out these tasks efficiently is the other part of the equation. Connectivity between cloud-based information and the hardware assets that update tracking platforms can offer Australian businesses clear sightlines across the breadth of their operations.

This whitepaper will explore the role of transparency and traceability across supply chain processes by examining three key areas: efficiency, resilience and customer experience.





Increasing Efficiency Across the Supply Chain

A 'single source of truth' can be achieved by implementing a connected management system that's updated in real-time. The ability to spot inefficiencies and optimise processes is enabled by deploying labelling solutions that can update inventory management systems instantly from anywhere along the supply chain.

For shipping and logistics operations, labels can convey detailed information with a simple scan. As orders are received and products are shipped, using labels that combine alphanumeric characters and patterns can offer a near-limitless

array of individual [asset tagging](#). An efficient labelling system can pinpoint products's precise location along the distribution process.

Workers tasked with picking and scanning need to store products on their associated pallets. Labels make scanning and identification processes easy, allowing teams to quickly carry out their assignments across the warehouse floor.

The Brother Titan range of [industrial label printers](#) is designed to keep pace with high inventory counts. Models like the [TJ-4522TN](#) can print as many as 10,000 labels per day, so that the production process isn't hindered while waiting for the creation of labels to affix to products.

One of the most important elements of a streamlined management system is the compatibility of the devices deployed in the field. Brother [Software Development Kits](#) (SDKs) ensure that newly acquired printing assets are compatible with various printer command languages, including ZPL2 emulation, allowing the label printer to easily communicate with your existing infrastructure.

The fear of downtime associated with product integration is one of the commonly voiced concerns about implementing new assets. The instant compatibility of Brother devices makes updating hardware resources a near-effortless process that won't hinder productivity.

By providing the ability to [spot inefficiencies](#), connected hardware and software solutions allow operators to optimise their processes within the supply chain.

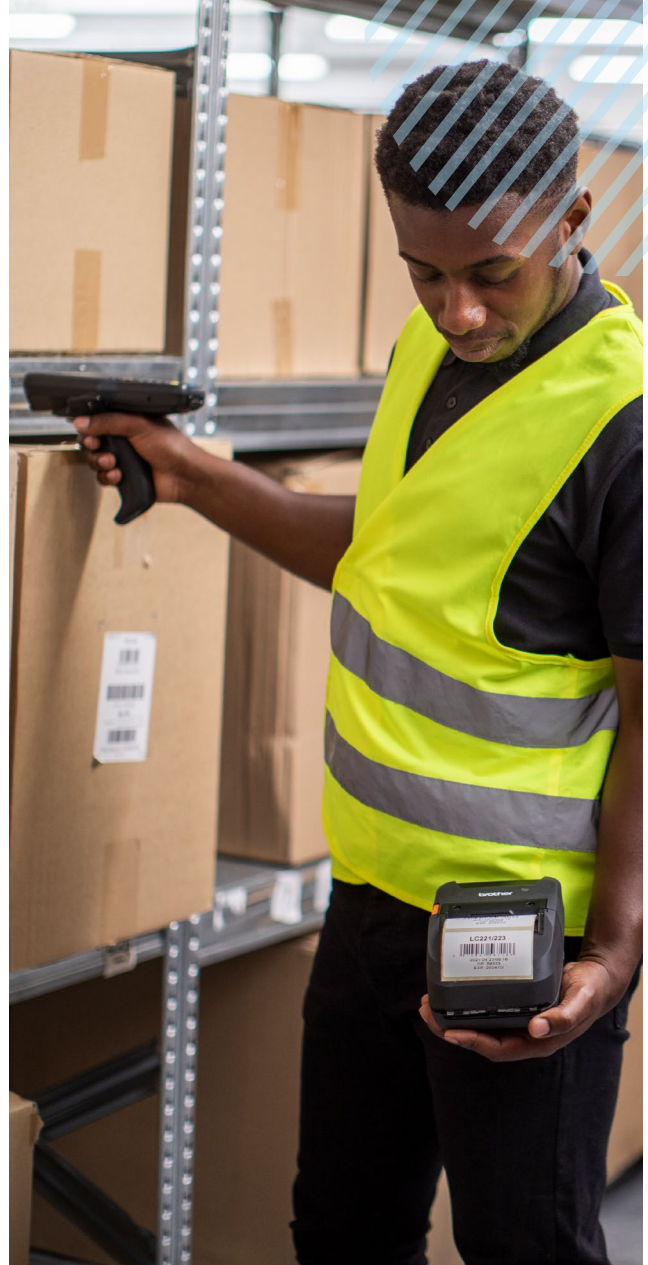


The Importance of Resilience

Mitigating risks and responding to disruption can improve operational resilience.

Product recalls are an unfortunate reality that no manufacturer can anticipate, but accurate labelling and connected software solutions can help minimise their damage. By tracking essential data such as creation dates, ingredient contents or point of origin information, inventory management platforms can identify damaged or ineffective products within a larger shipment. This means that only the defective items within a larger order are returned. Rather than recalling an entire skid, the ability to isolate individual products within the distribution chain can save on return, restock or reshipment costs for non-damaged items.

The keys to resilience are traceability, and getting connected hardware and software to provide as close to real-time updated information as possible. Business owners who arm their workforce with tools that can react to unexpected disruptions quickly and efficiently have a tactical advantage when incidents occur.



One of the most common reasons for product recalls is misprinted label information, so utilising reliable print solutions in the field should be a mission-critical priority for logistics operators. Brother [portable printers](#) provide the ability to print easy-to-read labels that can be created on the go. In the event of a product recall or restock situation, the durability of devices like the Brother [Portable Printer RJ-3250WB](#) ensure that new labels can be created the moment products arrive back at the warehouse.



Handheld devices save time and increase productivity for warehouse workforces. Without them, returned products would need to be relabeled at a central processing location within the facility, increasing the downtimes associated with transportation and waiting for new labels to be created.

[Portable scanners](#) can further automate operations and workflows across the supply chain. Printed manifests that have been manually checked off and signed work orders can be digitised instantly in order to mitigate the risk of paper loss or damage.

Today's databases are equipped to receive these digital facsimiles of important paperwork in real-time, updating connected management platforms

instantly and effortlessly. Devices like the Brother [Portable Document Scanner DS-940DW](#) are equipped with built-in Li-ion batteries so that businesses can ensure fail-proof connectivity to integrated software tracking systems.

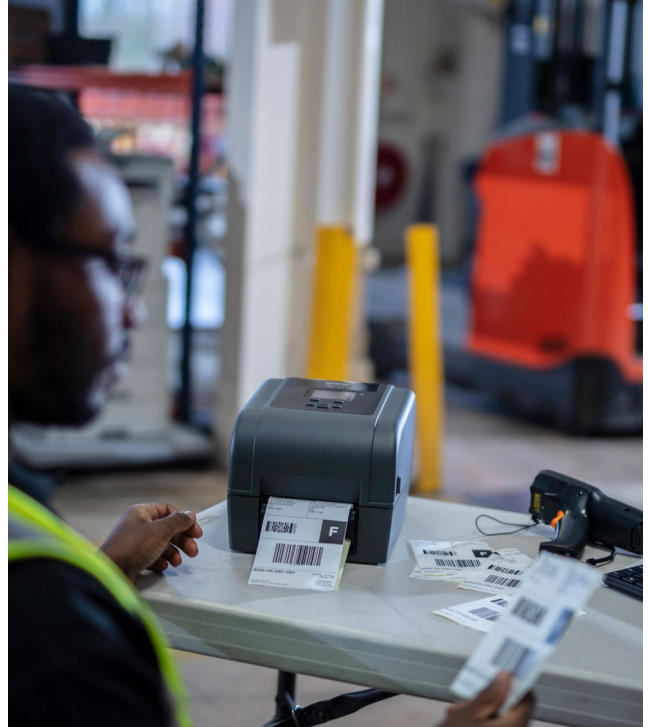
Disruptions across the supply chain will inevitably occur, so having the right tools in place can minimise the risk while maintaining productivity levels.

An Improved Customer Experience

Traceability isn't valuable just for supply chain managers — today's consumers are invested in the shipping process as well. They want information about product delivery schedules and the origins of their food and other products. Customers care about authenticity and are digitally capable in ever-increasing ways, and look to source quality products as well as receiving precise delivery dates.

From shipping schedules and updates to QR codes that contain instruction manuals and other valuable product information, businesses are recognising an opportunity to increase brand awareness and loyalty by servicing their online customers well.

Providing accurate and detailed near-instant status updates of buyers' orders can effectively turn traceability into a revenue driver for digitally competent businesses. Brother [thermal label printers](#) facilitate the availability of this information by printing high-quality labels and QR codes. Devices such as the Brother



[Thermal Transfer Label Printer TD-4650TNWB](#)

provide businesses with the flexibility to utilise a wide array of label types to meet the needs of their business operations.

Today's QR codes offer increased reliability. [Deploying QR labels](#) virtually ensures that delivery staff and end users can scan them regardless of weather conditions and other factors that may unexpectedly damage them. A code can still be easily single-scanned even if only 30% of it is intact.

Connected software like the [Brother P-touch Editor](#) on select devices offers the ability to store over 7,000 characters of information on a single QR code. With a simple scan of their smartphone, end users can access data regarding their new product, as well as manuals or information about a business or similar offering in order to drive brand awareness. [P-touch Editor can be downloaded](#) to integrate with supply chain management software for the creation of labels and QR codes.



Conclusion

Brother offers solutions to enhance the transparency of supply chain processes.

Brother provides dependable solutions that can improve traceability across the supply chain. Businesses both large and small trust the reliability and efficiency of Brother connected print, scan and label solutions. Our products support integration with today's digitally native management systems for increased visibility from end to end.

The interoperability of hardware and software systems can provide a distinct advantage when navigating the complexities of a manufacturing and distribution business.

To learn more about how your organisation can enhance its operational efficiency with the right connected tools, **contact Brother today**

Sources

¹Team Transport: "Supply Chain Predictions for 2022." Retrieved from <https://teamtransport.com.au/supply-chain-predictions-for-2022>

²Westpac: "Why Traceability is so Important for Aussie Farmers" Retrieved from [Why traceability is so important for Aussie farmers | Westpac | Westpac](#)

³Bain & Company: "Traceability: The Next Supply Chain Revolution." Retrieved from [Traceability: The Next Supply Chain Revolution | Bain & Company](#)

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