

How Mobile Technology Accelerates Warehouse Efficiency

WHITEPAPER



brother
at your side

A photograph of a young Black man with short dark hair, smiling at the camera. He is wearing a bright yellow high-visibility safety vest over a dark grey polo shirt. He is standing in a warehouse or industrial setting, with a metal cart and blue plastic crates visible in the foreground. The background is slightly blurred, showing other workers and warehouse shelving. The image is framed by a blue vertical bar on the left and a blue diagonal striped graphic in the top left corner.

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Introduction

Large warehouse environments require technology solutions that enhance workflow efficiency. Deployed devices must fit the needs of the environment. For example, personnel who have to traverse the floor in order to print manifests and barcode labels can lose valuable time over the course of a shift. Integrating mobile technologies that are configured with inventory management and connected software can help overcome these challenges.

The integration of mobile hardware devices and supply chain management software is part of a push towards the digitisation of operations that is increasingly common for today's business operations.

Australia could see a 1.4% per annum improvement in GDP worth \$32.6 billion over the next decade¹ through leading practice supply chain digitisation, thanks to the rise of connected, self-orchestrating ecosystems. In order to keep pace with increasingly complex supply chains and the demands of a digitally native consumer base, the adoption of these productivity-enhancing digital infrastructures is no longer a matter of convenience — it is a necessity.

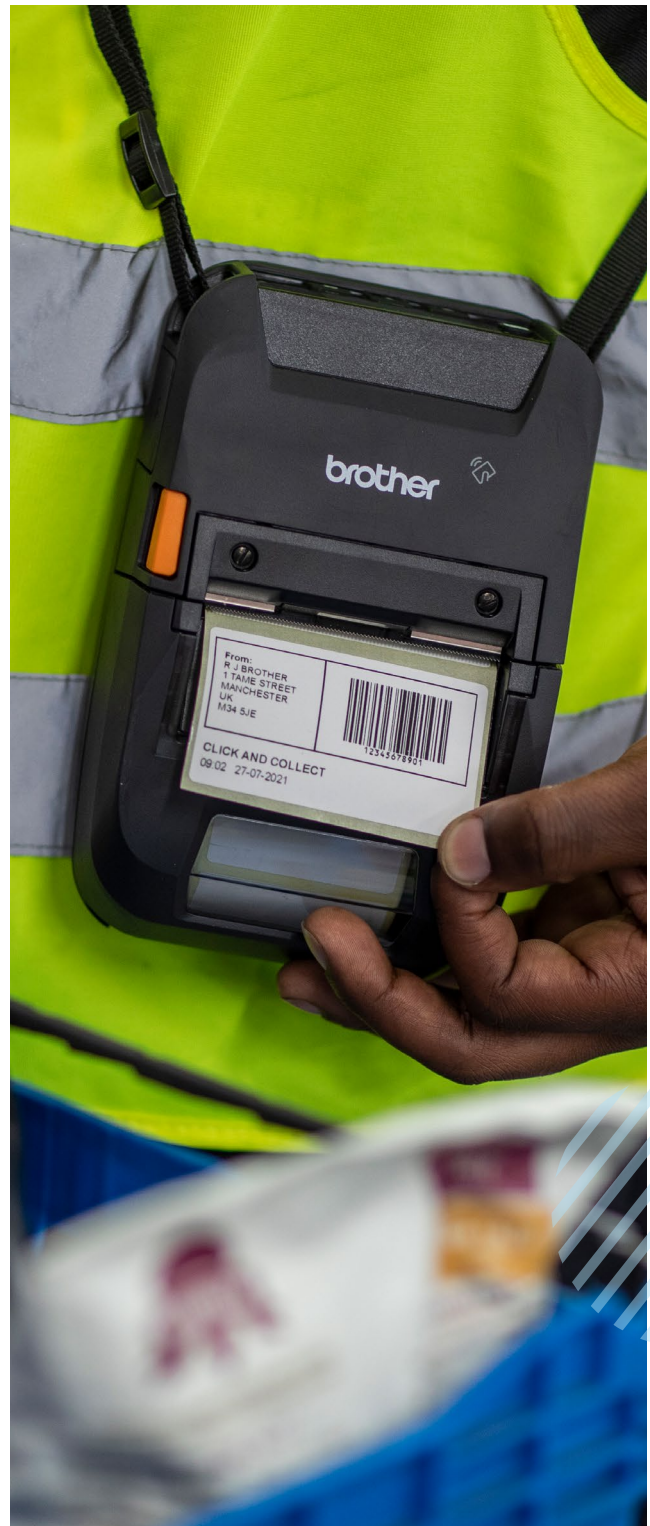
Let's examine how [mobile technologies](#) can help increase traceability efforts and improve productivity within your business.

How to integrate mobile print & scan solutions into your warehouse

The go-to efficiency of mobile connectivity can improve productivity on the warehouse floor. Brother [mobile print solutions](#) have a small footprint and can be deployed anywhere, providing a greater degree of versatility for your workforce. Devices like the [RJ-3250WB](#) offer a rugged design that's tough enough to last in the warehouse environment. Capable of printing inventory and shipping labels, barcodes and shelf-labels, today's mobile printers ease every step of the logistics process.

The benefits of deploying portable print devices in the warehouse include:

- Unbroken workflows, thanks to print solutions that can travel to where they are needed instead of having goods picked and brought to a single printing area for labelling
- Support for paper-light warehouse operations, with label printing that paves the way for efficient barcode scanning practices
- Versatility regarding the shapes and sizes of labels produced, depending on the model





Printers aren't the only devices that can offer mobile connectivity. Equipping your workforce with [portable document scanners](#) can eliminate manual processes. Document scanners aid in digitising your shipping manifests, inventory counts and other important paper-based workflows. This allows you to update your supply chain management software from anywhere in the warehouse.

Upon scanning, notifications regarding errors or completion integrate in real-time to inventory management platforms, offering the ability to react to situations as they develop on the warehouse floor.

Today's mobile technologies can empower and connect your personnel like never before. Applications such as Brother [iPrint&Scan](#) and [iPrint&Label](#) can be utilised on mobile phones, laptops and tablets to augment the capabilities of compatible label printers. For example, these handy apps can be used on devices such as the [QL-820NWB](#), which have an optional li-ion battery unit for printing away from power sources.

By authorising connection to your cloud-based systems, you can exponentially increase the number of deployed devices in your work environment. Today's applications can transform every worker's mobile device into a part of your warehousing workflow.

Here's how Brother connected applications make every device a versatile workstation:

- [iPrint&Scan](#) allows you to connect a compatible Brother printer to your wireless network and scan and print documents from a smartphone, tablet or laptop. With this versatile application, your workers can edit, preview and send faxes, preview copies, send tasks to printers and check the status of your connected machines – all from their mobile devices
- Brother [Mobile Deploy](#) also allows you to send a variety of custom labels to A4 mobile thermal printers like the [PJ-883](#) on the warehouse floor. Thanks to AirPrint technology, your workforce will no longer have to return to a centrally located device in order to print necessary documents

Taking advantage of the connectivity of Brother devices and applications can offer productivity enhancements across every aspect of your warehouse operations.

Mobile barcode solutions

Your business deserves technology solutions that stand up to fast-moving warehouse environments. In order to maintain efficiency, understanding exactly where to find products on the warehouse floor is essential. To aid the identification process, each item in the warehouse is assigned a unique [barcode](#). That's where a thermal label printer can be extremely helpful, given its ability to print high-quality labels quickly and efficiently.

From labels to record incoming raw materials – or inventory parts at the receiving dock – to on-floor work orders, scannable barcodes relate vital information from supply chain management platforms.

Compact devices like the portable printer [RJ-4250WB](#) can create durable barcode labels up to four inches (102mm) in width. These rugged devices are perfectly suited for the warehouse floor due to their reliable thermal technology. Featuring a rugged design with an Ingress Protection Rating² (IP54) rating, the RJ series has been drop tested up to 2.1 metres, providing extensive durability for your warehouse workflows. These devices are also fully protected against solid objects, and can resist the splashing of water from any angle.



As they have few moving parts, they can even function on their sides or upside down without losing quality. The rigours of the warehouse environment expose devices to vibrations, falls or other potential hazards — with a thermal label printer solution, you won't have to worry about damaged devices slowing productivity on the floor. And with no ink or toner required, your staff won't interrupt workflows or lose productive time searching for replacements.



Device durability isn't the only essential requirement for your mobile hardware: You need to know that your connected labellers have the power to last throughout the workday. Updating product quantities and categorising merchandise are repetitive workflows that can tax even the most durable devices. Devices like the P-Touch [PT-P950NW](#) use rechargeable Li-ion batteries to provide longer runtimes.

Warehouse operators understand the importance of adapting to ever-evolving workflows. The true benefit of [embracing digital technologies](#) that can effortlessly communicate with connected hardware is the ability to pivot mid-task.

In the event that a distribution order changes, Brother's [P-touch Editor](#) software allows your personnel to reformat labels directly from the warehouse floor. Shifting logistics information or updated compliance details can be deployed on new labels without having to return to a central location and wait for new labels to be created. If a change order comes through, a new label can be formatted, created and affixed to the product on the spot.



Optimise your supply chain with mobile solutions

With mobile technology accessible to every member of your warehouse and fulfilment teams, you can realise many benefits in inventory management and order processing operations.

Some warehouse operators are hesitant to revamp their manual, paper-based processes for fear of the perceived downtime associated with overhauling their workflows. Brother [Software Development Kits](#) (SDKs) are designed to connect mobile print, scan and label solutions with supply chain management software quickly and without impacting the pace of production whilst they're installed.

Through seamless integration of Brother's mobile devices, you can enjoy the benefits of connected technologies as soon as you introduce them to the warehouse floor. Once connected, your hardware and software will act in unison, offering a variety of productivity-enhancing benefits, including:

- The ability to track the quantity and location of parts and products to make order picking and packing faster and more accurate
- Providing real-time updates of stock levels to ensure that replenishment is always done at the best time to help optimise inventory and purchasing processes
- Constant connection between mobile devices and apps to business information systems, allowing data to flow seamlessly and directly to the people that need it most
- The security and efficiency that come with an updated firmware and system software, without the need to manually deploy the latest versions to each device manually

The interconnectedness of mobile devices and supply chain software means you can execute job-specific key functions to any location in a warehouse. From raster data compression commands that enable your printer's acceptance of DRC-compressed data to CPCL print emulation, you won't sacrifice any of your mission-critical key functions by transitioning to a mobile-capable print architecture.

Here are some of the integrated commands you can assign to your mobile devices:

- **Raster data emission commands:** Inputs such as CmdSendBlockData enable you to send blocks of information to connected devices
- **ESC/P:** Epson Standard Code for Printers, or Escape/P allows your thermal printers to toggle between bold and unbolded fonts, along with a variety of other escape sequences
- **ZPL emulation:** Convert, preview and render raw Zebra Programming Language (ZPL) commands to your preferred image and document formats such as PNG, JPG and PDF
- **CPCL emulation:** Your preferred CPCL page print mode or CPCL line print mode command functions allow you to add text and compressed graphics to barcode labels





Conclusion

Brother offers a variety of integrated, mobile-capable warehouse devices designed to work in tandem with connected applications and software. The result: A streamlined business workflow across the warehouse floor that helps drive your supply chain business forward in today's digital world.

To learn more about
how Brother brings
cutting-edge connectivity
to optimise business
operations

contact us today

Sources

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