

WHITEPAPER:

# **IMPROVING SUPPLY CHAIN ACCURACY, PRODUCTIVITY AND SPEED**

**HOW NEXT-GEN PRINTING AND LABELING SOLUTIONS SUPPORT  
CRITICAL AGILITY FOR SMALL AND MID-SIZE BUSINESSES**

*The greater your agility, the better your ability to anticipate and respond...*



In today's speed-of-light business environment, getting inventory out the door faster, tracking it better, and minimizing the cost of doing it is what keeps you in the game.

Small and mid-size businesses expecting to compete in today's marketplace must become highly nimble, especially when it comes to warehouse and supply chain operations. The greater your agility, the better your ability to anticipate and respond to the "Amazon Effect" – the expectation for fast, frictionless transactions that has raised the bar for manufacturing and retail operations, transportation, logistics and most other industries.



*The pressure intensifies to get orders out the door faster with scarcer resources.*

## Rethinking warehouse operations

Achieving this new normal requires both rethinking warehouse operations and capitalizing on new technology to boost productivity, speed delivery, and lower costs. It helps to first understand the changing warehouse landscape:

Warehouse size is growing right along with e-commerce, with the average square footage in 2018 at 220,800 in 2018, up from 193,190 a year earlier.<sup>1</sup> But rather than huge warehouses typically located near major parcel shippers, the trend is to locate smaller yet taller multi-story facilities near major urban areas closer to customers, helping to cut the costs of last-mile delivery.

Serving as key strategic assets, warehouses of any size from micro to massive need to be more configurable, adaptive and movable than in the past. Frequently, companies may start with storage space in rear of a store, move to shared space and then eventually to a dedicated warehouse – all while focusing on getting customers what they want as fast and cost-effectively as possible.



Investment in productivity-boosting technologies take on new importance as the pressure intensifies to get accurate orders out the door faster with scarcer resources. Thirty-eight percent of respondents to the “2018 Warehouse and Distribution Center Operations Survey” by Peerless Research Group (PRG) reported estimated capital expenditures for warehousing equipment and technology in 2019 to be less than \$250,000.<sup>2</sup>

The persistent labor shortage is also a huge problem, with 55 percent of the warehouse professionals surveyed by PRG citing the inability to attract and retain a qualified hourly workforce as their top concern. They also reported that temporary workers comprised just under 20 percent of their workforce during peak season,<sup>3</sup> underscoring the need for technology that is easy to learn and easy to use.

*One of the smartest places to start is also the simplest. Barcode labels...*

## Smart strategies for accelerating success in the warehouse

Warehouse technology investment includes innovative digital tools such as automation, robotics, AI and IoT, and next-generation versions of stalwarts such as warehouse management systems (WMS), barcode scanning and RFID, and mobile and stationary label printers.



One of the smartest places to start is also one of the simplest. Barcode labels are recognized as the lowest hanging fruit and the logical place to begin improving productivity. Because barcode labels play essential roles throughout virtually every aspect of supply chain operations – something as simple as choosing the right mobile and stationary label printers can help strengthen your competitive edge. Here's how:



**Improve supply chain visibility.** Accurate labeling with barcodes or RFID tags is crucial to real-time tracking of pallets, packages and products on their journey from manufacturer to warehouse to customer, ensuring they get where they need to be when they need to be there. As just-in-time inventory increasingly moves from nice-to-have to must-have, visibility becomes an even higher priority. Cost-conscious supply chain partners do not want to receive an item until they absolutely need to have it.



**Support manufacturing processes.** Warehouse workers can scan shipping labels to record incoming raw materials or inventory parts at the receiving dock, scan the materials and storage location once they're moved to inventory, and, finally, scan the labels to pick raw materials or parts as needed to fulfill factory floor work orders.



**Reinforce quality assurance and reduce fulfillment errors.** In today's omnichannel era, brick-and-mortar stores as well as online retailers depend on fulfillment houses to send the correct products to their customers. Even though a 99.7 percent order fulfillment accuracy may seem impressive, that 0.3 error rate translates to more than 14 million errors annually, given the gargantuan order volume.<sup>4</sup> Helping to ensure packages contain the correct items through clear, proper labeling can minimize the risk of misidentified items and support quality assurance procedures.



## *Powerful, reliable yet easy to use mobile and stationary printers...*



**Streamline warehouse operations.** Customer expectations – such as same-day delivery, seamless returns, buy-online-pickup-in store and other facets key to a positive experience – continue to soar. In turn, this forces businesses, warehouses and their logistics and transportation partners to ramp up efficiency and productivity to new levels to ensure efficient routing, loading, unloading and shipping or re-shipping of merchandise. Mobile printers and strategically located stationary printers can save valuable time and ensure accurate labeling at every key supply chain juncture including:

- Receiving – Applying barcode labels as soon as inbound items arrive ensures they can be accurately unloaded, checked-in, put away or handled by automated applications.
- Picking – Generating barcode labels for each item picked allows them to be scanned right the in the staging or packaging area, then quickly and easily sorted for shipment.
- Packing and shipping – Creating new labels to identify finished goods is a vital task for workers who are kitting, completing light assembly or packaging items. In addition, ship-to-order applications can incorporate customer-specific labeling, scanning to fulfill orders and creating of accurate shipping labels.
- Cross docking – Already mandatory in some food sectors, cross docking is also gaining popularity for other time-sensitive merchandise. Mobile printing technology enables warehouse workers to literally jump inside trucks at the in-bound dock and start relabeling for store or customer delivery, increasing the efficiency of the ever-important last mile delivery.



**Do more with less.** Powerful, reliable yet easy to use mobile and stationary printers, integrated with WMS and other systems, enable warehouse workers to efficiently generate accurate labeling for all inventory entering and exiting the warehouse. As a result, warehouse managers can operate with fewer workers most of the year and bring seasonal or temporary workers up to speed quickly and easily during peak times.



## Investing in the right labeling technology

Small and mid-size businesses have plenty on their plates as they seek to build success in today's dynamic supply chain. While the right software and WMS systems are critical to achieving optimal warehouse productivity, businesses must invest wisely to optimize their value. Here are six criteria to consider when selecting labeling solutions:

- 1. Performance.** Speed is the name of the game in warehouses now. Mobile and stationary printers are no exception. They need to print a variety of barcode and RFID packaging, shelf, shipping and other identifying labels quickly, clearly and easily. They need to be rugged and durable enough to withstand constant use by multiple workers in environments that are often harsh.
- 2. Affordability.** With so many demands on your limited budget, you need to get the most bang for your buck. Advanced next-gen printers are more affordable than ever, but they're not all created equal. Make sure you compare printer prices and features.
- 3. Integration.** Plug and play printing solutions are easy to get up and running – without the aid of a professional IT team. Look for quick deploy printers that integrate seamlessly with your existing software or include bundled software, and can connect easily with any mobile device.

- 4. Ease-of-use.** Your workers need printing solutions that are easy to learn and easy to use without a major investment in training, especially if you depend on seasonal or temporary workers or face the common challenge of high turnover.
- 5. Reliability.** Once you've installed your labeling printing technology, you count on it to deliver for the long haul. Make sure your printers have premier two-year warranties.
- 6. Scalability.** Your printing solutions need to be flexible and versatile enough to grow with your business.

To boost your efficiency, productivity and revenue, you need a technology partner as nimble as you are. Brother Mobile Solutions offers a wide range of versatile, reliable advanced mobile labeling solutions ideally suited to give small and mid-size businesses the agility and flexibility required to compete in the dynamic e-commerce marketplace. With our extensive experience and proven track record, as well as our deep technology expertise and commitment to innovation, you can trust us to deliver the solutions, service and support you need to accelerate success.





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Sources

<sup>1</sup> <https://news.thomasnet.com/featured/labor-crunch-e-commerce-competition-drive-warehouse-automation-trends/>

<sup>2</sup> [https://www.logisticsmgmt.com/article/2018\\_warehouse\\_distribution\\_center\\_survey\\_labor\\_crunch\\_driving\\_automation?mod=djemlogistics\\_h](https://www.logisticsmgmt.com/article/2018_warehouse_distribution_center_survey_labor_crunch_driving_automation?mod=djemlogistics_h)

<sup>3</sup> [https://www.logisticsmgmt.com/article/2018\\_warehouse\\_distribution\\_center\\_survey\\_labor\\_crunch\\_driving\\_automation?mod=djemlogistics\\_h](https://www.logisticsmgmt.com/article/2018_warehouse_distribution_center_survey_labor_crunch_driving_automation?mod=djemlogistics_h)

<sup>4</sup> "Transformation in the retail, logistics and transportation industries," SJ Consulting Group