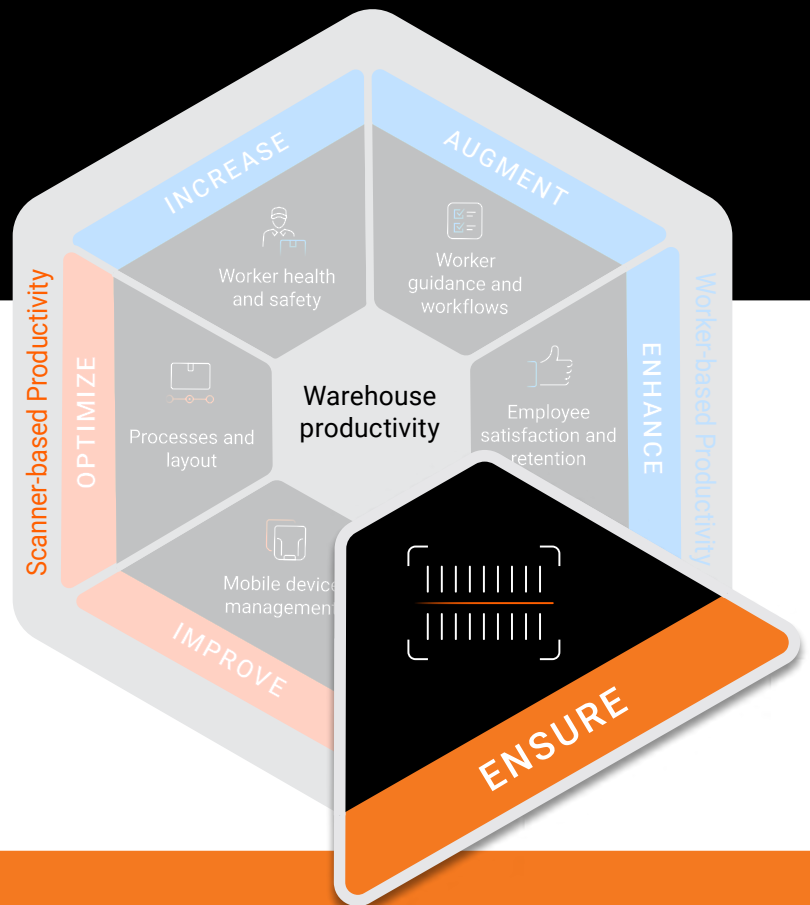


Where productivity starts

# Ensure reliable scanning accuracy and quality

## Six solutions paths to warehouse productivity

Investment in any individual path is a strong lever for productivity improvement. Together, they optimize the building blocks of barcode scanning: speed; accuracy; worker health and safety.



## Optimize scanning accuracy, quality, speed, and reliability

Everything in the warehouse has a barcode, including the workers, and every barcode is scanned multiple times. This basic function contributes to every process, from receiving to picking and kitting to shipping, and is essential to inventory and supply chain management.

**33%**

Fewer errors per ProGlove customers

**42%**

Managers reported inaccurate inventory as an issue

**99%**

Minimum threshold for scanner accuracy

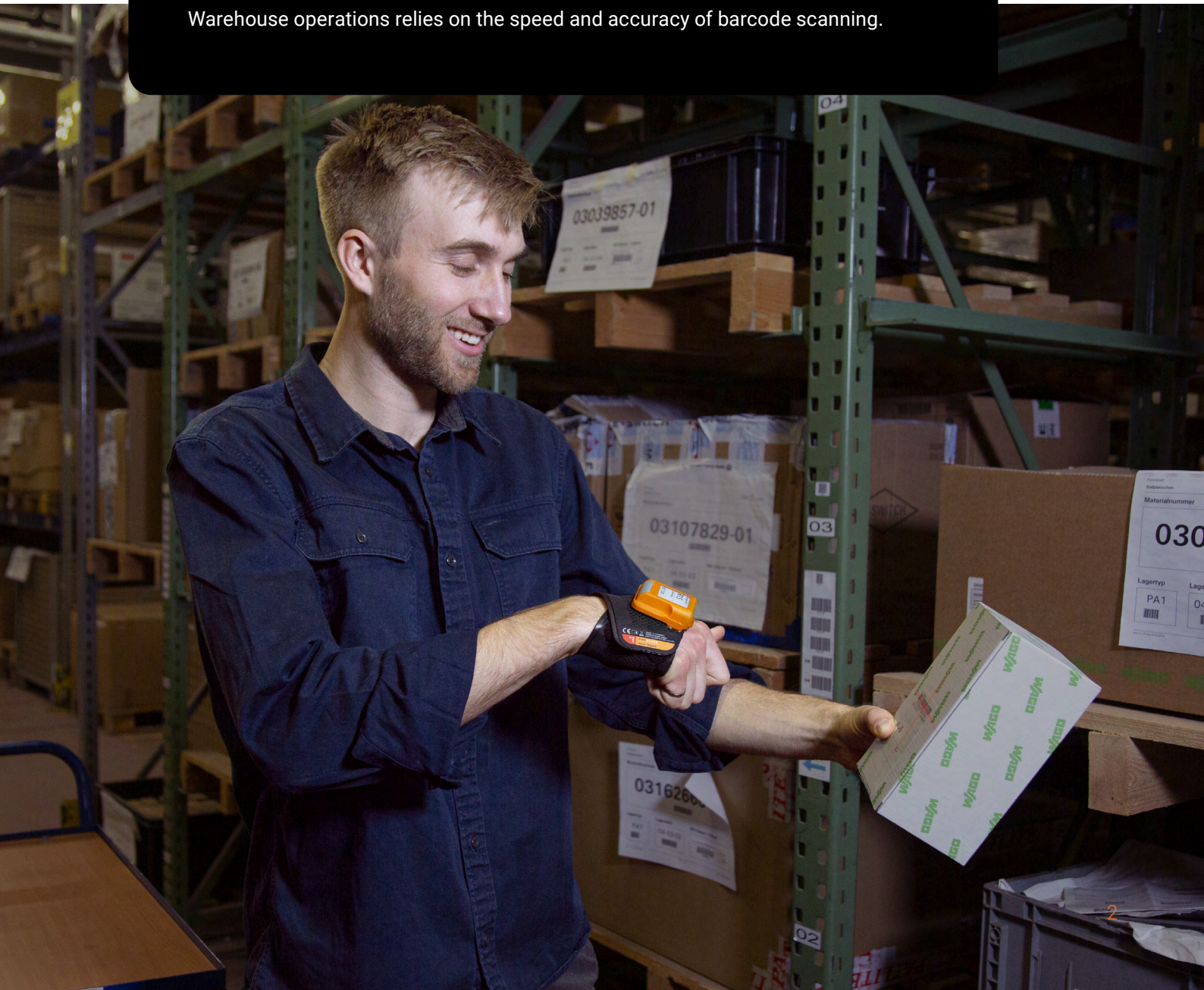
# Need for reliability

Reliable, accurate barcode scanning is the center of fast and efficient logistics. It can streamline processes, help to avoid errors, rework, and bottlenecks. Warehouse operations cannot tolerate anything less than a 99% accuracy rate.

Reliability and accuracy become even more important as warehouses must cope with the new volume and complexity of customer demand. This need to drive both agility and productivity can't be met by warehouse operations without the bedrock of barcode scanning.

Barcode scanning is also critical to compliance, creating a trail of provenance that can be traced to the origins.

Warehouse operations relies on the speed and accuracy of barcode scanning.



# Challenges

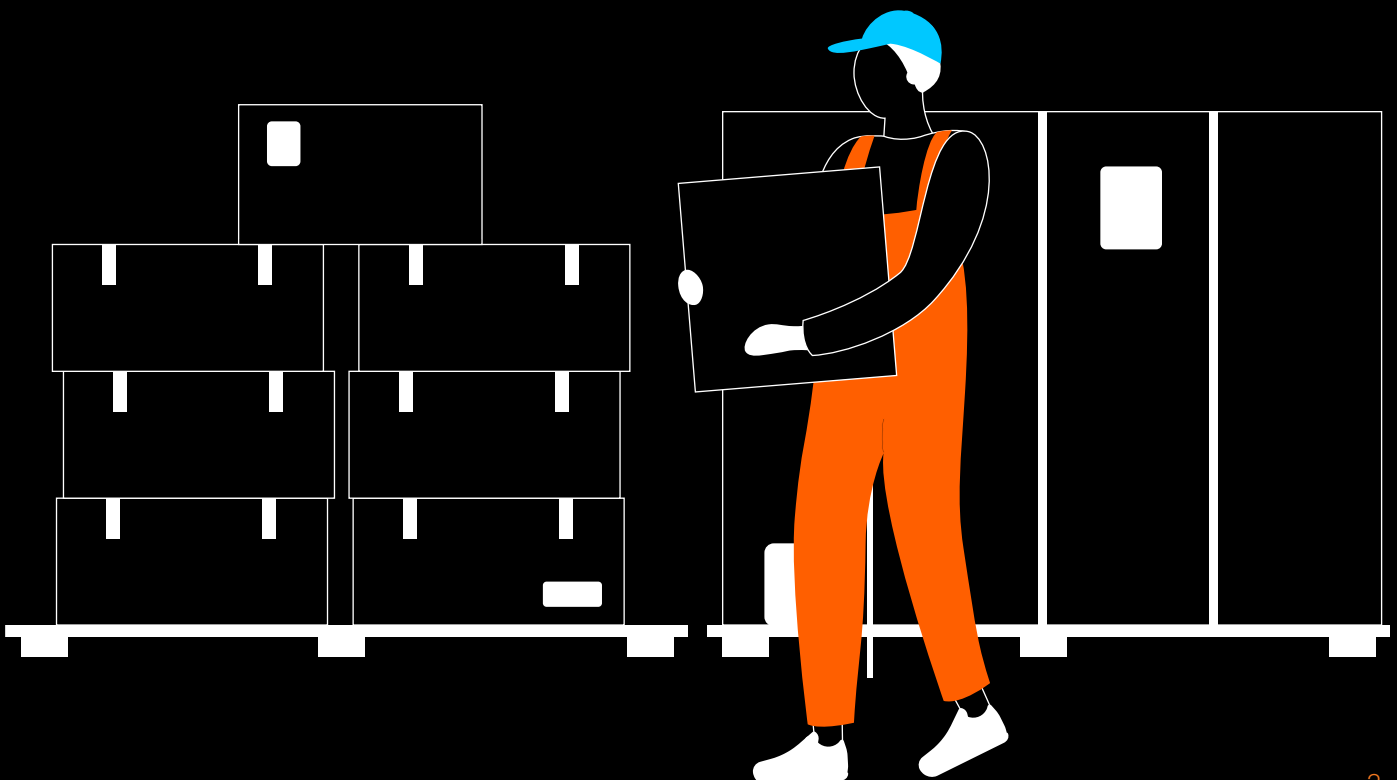
Warehouse operations faces two serious challenges which are directly related to the reliability of barcode scanning:

**1. Increasing demand triggered by ecommerce.** Warehouse operations is seeing hockey stick growth in the number, complexity, and time demands of customer orders.

- The Statista Digital Market Outlook forecasts that online shopping revenue in the U.S. will grow from 905 billion in 2022 to in excess of 1.7 trillion dollars by 2027.
- According to the most recent Third-Party Logistics Warehouse Benchmark Report by Extensiv, 53% of 3PLs fulfill orders in less than 1 hour. Twenty-nine percent (29%) of participants reported fulfilling orders within 30 minutes.

**2. Human error.** The warehouse worker is confronted with damaged barcodes, multiple barcodes, poor lighting, and challenging circumstances, as well as the restrictions of the scanning device, including ergonomics, weight, and ease of operation.

These conspire to seriously threaten the Warehouse Operation Manager's KPI for OTIF (on-time, in-full) fulfillment.



# You can scan better

Here are some of the most effective methods for increasing the readability and accuracy of barcode scanning:

1. **Choosing the right barcode scanning equipment:** Factors to consider include the scanning range, scan speed, and the type of barcodes that need to be scanned.
2. **Maintaining and cleaning the scanning equipment:** Dust, dirt, and other contaminants can reduce the accuracy of barcode scanning.
3. **Proper barcode labeling:** Factors such as the size and contrast of the barcode, the type of barcode, and the location of the barcode (it's distance from the worker, where the product physically sits) can all impact its readability.
4. **Lighting conditions:** Barcodes should be illuminated with bright, even lighting that does not produce glare or shadows.
5. **Training of personnel:** This training should include how to properly hold and position the scanning equipment, how to avoid common scanning errors.

These practices can significantly increase the readability and accuracy of barcode scanning, reducing the number of errors and misroutes, and improving the overall efficiency of warehouse operations.

## ProGlove customers report:

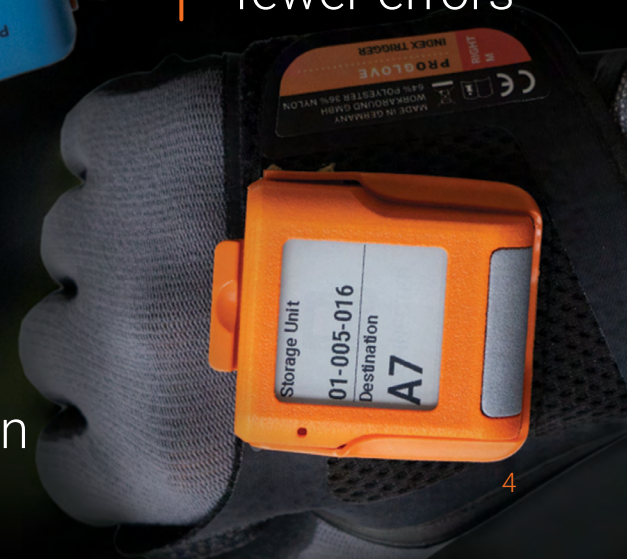
20%

gain in  
warehouse  
productivity

33%

fewer errors

6 seconds  
saved per scan



# Helping workers achieve



ProGlove has focused our next-generation thinking on the potential of the individual worker to excel.

“The human workforce is the center of our universe. We develop integrated hardware and software solutions that can equip the worker to significantly increase the speed, accuracy, and reliability of barcode scanning, which is a building block of logistics. We aspire to be the innovators, the disruptors that usher in a new era of logistics quality and productivity.”

**Ilhan Kolko, CPO, ProGlove**

From this unrelenting focus on improving warehouse productivity, we have developed a complete solution that delivers reliable barcode scanning, faster than ever before, that enjoys a 95% worker approval rating.

## Improving the scanning technology

ProGlove brings you new capabilities:

- Scan engines tailored to the specific use case, including standard, mid and multi-range (from standard to long-range) options.
- Omnidirectional scanning, with a wide range of angles.
- A “multi-scan” option to scan multiple barcodes at the same time in the right order.

ProGlove customers report a

**20%**

gain in warehouse productivity.

## Process-tailoring configurations

ProGlove’s scanning technology enables improvements in accuracy and readability by process-tailored configurations:

- Optimize decoding performance on 1D barcodes, including damaged and poor-quality symbols.
- **Display Mode** - Improves barcode reading performance off mobile phones and electronic displays.
- **Picklist Mode** - Enables picking out and decoding a barcode from a group of barcodes that are printed close together by placing the aiming pattern on the specified barcode.
- Exclude symbologies that you don’t need for the process from being recognized at all. The scanner becomes faster ignoring not needed symbologies.



“The potential of the scanner is especially important in the processes where we must react quickly and flexibly.”

**ALEXANDER TESCH**

Innovation Manager, Lufthansa Technik  
Logistik Services

# A checklist for ensuring reliable barcode scanning

- Get an estimate on how demand is growing, and the volume of barcode scans that will be required.
- Identify compliance, regulatory, and tracking needs.
- Select the scanners that are appropriate for the tasks – consider layout, types of barcodes to be scanned, distances, and ergonomics.
- Maintain your fleet of scanners, making sure they are charged, cleaned, and available.
- Train your staff on the use of the scanners in all circumstances.

## Ready to work smarter?

Visit [ProGlove.com](http://ProGlove.com) to see how ProGlove addresses 6 individual paths to increased warehouse productivity.

1. Worker health & safety
2. Worker guidance & workflows
3. Employee satisfaction & retention
4. **Reliable scanning accuracy & quality**
5. Mobile device management
6. Processes & layout

