

Maximizing value

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Client success stories
in harnessing Verity's
benefits



verity

Introduction



Automated warehouse solutions, including Verity, provide significant value both immediately and over the long term. Recent interviews with Verity clients have uncovered **important usage trends at warehouses** with established Verity implementations. These trends provide insights into the **most common benefits achieved**, as well as when users can expect specific benefits within a **typical implementation timeline**.

At the highest level, inventory accuracy and compliance improvements are often seen shortly after implementation, whereas significant enhancements in four-wall productivity and operational excellence materialize over the long term. Clients who adopt best practices consistently achieve maximum value from these short-

and long-term benefits. The findings from these client discussions are useful for organizations seeking to understand what benefits can be anticipated from the Verity system, when they are most commonly achieved, and the best practices that promote the highest level of value at any stage in a Verity implementation.

Proven benefits of Verity

- 1 IMMEDIATE REDUCTION IN INVENTORY LABOR AND ITS ASSOCIATED COSTS
- 2 SHORT-TERM DECREASE IN INVENTORY WRITE-OFFS AND/OR SHRINKAGE
- 3 LONGER-TERM IMPROVEMENT IN OVERALL WAREHOUSE PRODUCTIVITY
- 4 LONGER-TERM IMPROVEMENT IN EMPLOYEE SATISFACTION AND RETENTION
- 5 IMPROVED SERVICE QUALITY AND CUSTOMER SATISFACTION

The main drivers of improved employee efficiency and satisfaction are 1) automating manual scanning of thousands of pallet movements each week (the most disliked task in the warehouse) and 2) providing a working

environment without process disruptions caused by errors. Combined, these improvements reduce the cost per unit moved through the warehouse, directly impacting the bottom line for you and your clients.

Verity's solution **improves inventory accuracy and compliance**, leading to significantly **improved warehouse productivity**, **reduced cost per unit moved** through the warehouse, and **improved employee efficiency** and satisfaction. Achieving these benefits begins with the ability to identify errors before they evolve into larger operational issues.

Finding errors at the right time

Validating WMS data and putaway accuracy with Verity's autonomous drones significantly enhances the speed and accuracy of the picking and order fulfillment processes. Data captured by the drones enables warehouse operators to target the costliest mistakes at one of the most crucial points in the lifecycle of a pallet: *before picking*.

Verity clients have documented that most errors occur during putaway, and the impact of those errors becomes significant during the picking process – when the warehouse team is racing to ensure on-time and 100% order fulfillment. To find these errors quickly, Verity's drones are deployed to scan racked pallets and validate putaway accuracy. Importantly, this gives inventory managers time to address errors before they create issues that result in vendor compliance penalties or client dissatisfaction.

Key productivity metrics

While it is common to view error identification as the sole benefit of inventory tracking automation, the benefits of the Verity system extend into many areas of warehouse operations to improve overall productivity. For example, Verity's clients consistently see benefits at an individual employee productivity level. The ability to verify the quality of team and individual output, analyze tendencies, and identify root causes, significantly impacts the quality of both individual outputs and collective productivity. Verity's clients report increases in overall output – without the need to increase labor resources. (Though human errors may recur, daily scanning by the drones identifies and reports these errors before they impact operations.)

CLIENTS REPORT IMPROVEMENTS IN A WIDE VARIETY OF PRODUCTIVITY METRICS, INCLUDING:

FEWER CANCELED ORDERS

INCREASED PERCENTAGE OF ON-TIME SHIPMENTS

FEWER EMERGENCY REPLENISHMENTS AT

PICKING LOCATIONS

INCREASED PERCENTAGE OF FULFILLED ORDERS

MORE EMPLOYEES MEETING PRODUCTIVITY

TARGETS FOR PUTAWAY, REPLENISHMENT, AND PICKING ACTIVITIES

REDUCED FREQUENCY OF CYCLE COUNTS

FEWER WRITE-OFFS OF PERISHABLE GOODS

Several clients report that while they expected Verity's system would help them initially recover pallets they had lost over several years, they did not anticipate the number of recovered pallets to be as high as they were. Though this immediate benefit tends to settle into a lower, steady state after the first month or two, there is still immense value in locating lost pallets daily. This is especially true for pallets that contain seasonal or perishable goods.

Unique uses of the Verity system



In addition to the improvements seen across the Verity client base, some clients report using the system to provide unique value. **Following are just two examples:**

IMPROVED CUSTOMER SERVICE FOR LOGISTICS PROVIDERS

For 3PLs and logistics providers, high service levels are crucial, and tracking errors is a fundamental customer expectation. This requirement not only holds providers accountable for timely deliveries and product safety but also benefits warehouse operators. It encourages them to identify and rectify inventory errors, leading to improved processes and enhanced operational efficiencies, ultimately elevating service quality.

Verity's system facilitates this improvement by tracking pallet movements throughout the warehouse, including capturing photographic evidence with drones and conducting additional verifications. Utilizing images to identify the root causes of errors helps prevent their recurrence, reducing vendor compliance issues. Drone scans of all daily pallet movements allow Verity users to assure every action in the warehouse is recorded accurately, enabling transparent communication with customers. Providing comprehensive data on inventory status and detailed explanations of errors builds customer trust in the warehouse's management capabilities, reinforcing the provider's commitment to maintaining high service standards.

ENSURING EMPLOYEE ACCOUNTABILITY

Verity's enhanced data tracking capabilities are being used to enable better employee accountability and improve labor quality and efficiency. Using the system to audit employee accuracy, a vital measure in an industry where employee turnover is notoriously high, adds considerable value.

Training new employees is a continuous process, and inventory drones can serve as a valuable training aid. They monitor all actions of new hires weekly during their training, facilitating quality control and providing immediate feedback. This approach ensures new employees meet both productivity and accuracy standards.

Maintaining a balance between productivity and quality is essential. Solely focusing on productivity metrics, such as picks or putaways per hour, can deter employees from reporting errors or prioritizing accuracy. This can lead to 'snowballing' errors that allow minor mistakes to escalate into larger issues. By incorporating Verity's drones, management can address this issue, establishing clear priorities for productivity and quality, and effectively measuring individual contributions to these goals daily.

An ideal day in the life with Verity's drones

Among the best practices shared by users is **how they put the Verity drones to work in their warehouses every day**. Though the specifics vary based on the warehouse environment, in general, this is how **Verity clients describe an ideal 'day in the life' using Verity's drones** to achieve key benefits:



12 am – 5 am

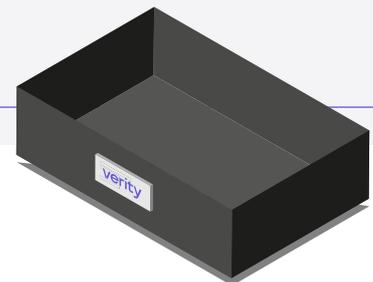
Release the drones overnight

The drones scan all pallets that have been moved within the last 24 hours. The data collected is then used to correct errors and provide immediate feedback to workers to facilitate training and process improvements.

In some cases, the drones are assigned to scan:

- > all products belonging to a single client (at 3PLs) ahead of customer visits, Quarterly Business Reviews (QBRs) with specific customers, or customer-specific team evaluations

- > high-value inventory aisles/locations to recover high-value pallets and mitigate the impact of write-offs on cost-per-unit numbers in preparation for quarterly financial analyses





5 am – 7 am

Review reports by inventory manager and supervisor

At the start of the first shift, the inventory manager reviews the report in the Verity Cloud to prioritize issues for correction based on the following criteria:

- > For fulfillment of large client orders, inventory managers deploy teams to fix all errors on pallets needed to fulfill those orders, including 'Empty Location' (Barcode Expected, Empty Location), 'Barcode Mismatch' (Barcode Expected, Other Barcode Found), and 'Potential Issue' (Barcode Expected, Non-Empty Pallet w/ no Barcode Found).
- > Inventory managers compare the list of errors with the intended putaway locations for the day, such as 'Non-Empty (barcode)' (Empty Expected, Barcode Found), and 'Non-Empty (no

barcode)' (Empty Expected, Non-Empty Pallet w/ no Barcode Found). If there are locations that are not empty but are supposed to receive a pallet that day, a team is deployed to correct the issue before the incoming pallets are received.

Based on those activities, the inventory manager assigns staff to correct issues.

Supervisors responsible for training new workers review the accuracy of their movements based on the last 24 hours and provide feedback.



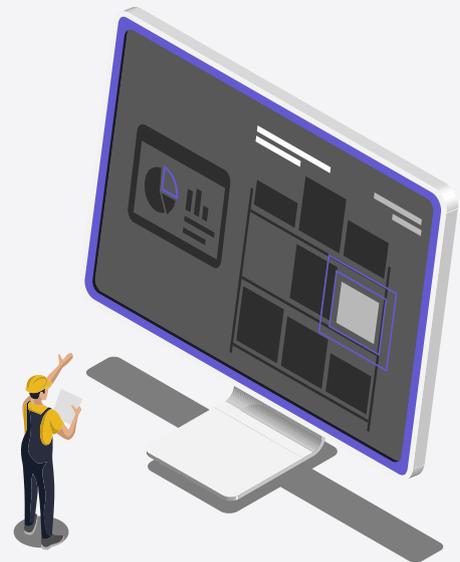
7 am – 9 am

Issues are addressed and system updated

All prioritized issues are investigated and corrected.

Workers continue fulfilling orders that require inventory in 'validated' (Barcode Expected, Barcode Match) locations.

Supervisors share inventory accuracy metrics with workers and discuss next steps for improvement.





9 am – 12 am

Operations continue, next scans are scheduled

Orders are fulfilled and pallets are put away without the friction of accumulated errors.

The operations or inventory manager determines what locations should be scanned that night to repeat the process and continue to reduce errors and their impact on productivity.



What's Next?

One of the greatest strengths of Verity's system is that it offers users **flexibility** and **scalability**.



As the business of our clients evolves, Verity's goal is to continue to enhance the Verity system by developing new, innovative technology that further improves the operational and business value it provides. By dedicating time to understand how Verity supports best practices in the warehouse, we are partnering with our clients to enable better inventory management processes that improve productivity and drive operational excellence.

Why Verity?

Founded in 2014, deep-tech scale-up Verity delivers **fully autonomous indoor drone systems** that are trusted in environments where failure is not an option. Headquartered in Zurich, Switzerland, with global operations, Verity's system is used in warehouses to gather valuable insights that **enable greater operational efficiencies**. The Verity system is **built in Switzerland** and engineered to optimize **safety, reliability,** and **performance** from the ground up.

The Verity system has completed nearly 50 million inventory checks and is installed and delivering benefits at more than 65 sites across 13 countries on 3 continents.

Current projects include large implementations at DSV, KeHE, Maersk, and Samsung SDS. Verity has a strong track record in the warehousing and logistics industry, with its roots going back to Kiva Systems (now Amazon Robotics), which disrupted an entire industry and helped Amazon become the world leader it is today. Developed by the world's leading experts in robotics and machine learning. The company is dedicated to applying advanced automated systems to enable the zero-error warehouse.

VERITY'S MOST SUCCESSFUL CLIENTS SHARE 2 OR MORE OF THESE ATTRIBUTES:

VALUE FREQUENT, ACCURATE

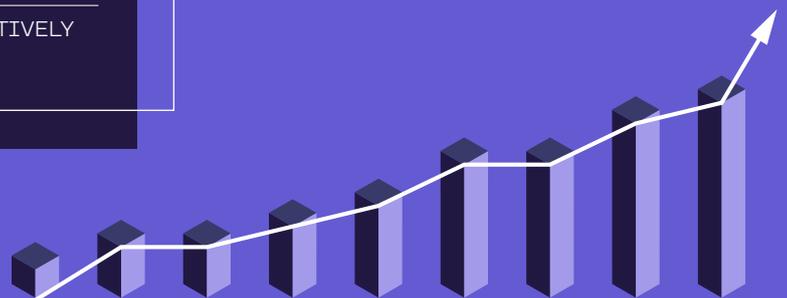
INFORMATION ON STATUS OF GOODS

MANAGE FACILITIES WITH INVENTORY STORED ON FULL PALLETS IN HIGH-BAY RACKING

EXPERIENCE A RAPID FLOW OF GOODS OR HIGH TURNOVER OF INVENTORY

HANDLE HIGH-VALUE GOODS

LOCATED IN A REGION WITH RELATIVELY HIGH LOCAL LABOR RATES



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