

DCSOLUTIONS

Inventory Tracking Solution a High-Flying Success

THE CUSTOMER

On is an athletic footwear, apparel, and accessories company headquartered in Zurich, Switzerland. Founded in 2010, the high-performance sportswear brand has fast become a global entity with 52 branded stores and 10,000 dealers in more than 60 countries. Its workforce includes more than 2,800 individuals.

THE PROVIDER

Verity, headquartered in Zurich, Switzerland with offices in Chapel Hill, North Carolina, is a developer of autonomous indoor drone systems. Founded in 2014, this pioneering AI and robotics company currently delivers AI-powered mobile intelligence in 13 countries and counts 160 employees within its ranks.

by June Allan Corrigan

The meteoric rise of On, a Swiss sportswear brand, started with a shoe. But not just any shoe. The company's signature product, with its unique cushioning system and distinctive sole design, has attracted serious runners and casual wearers around the world. Since launching its premium footwear line 14 years ago, On has expanded offerings to include apparel and accessories.

The company is on a fast course. In a bid to optimize inventory management and ultimately enhance supply chain efficiency and precision, On recently joined forces with Verity, an AI and robotics company, to deploy fully autonomous drones in its warehouses.

On's phenomenal growth shows no signs of slowing down. In 2023, the company recorded revenue of 1.8 billion Swiss Francs (\$2 billion), a 55% increase that significantly exceeded expectations set at the beginning of the year. As sales racked up, On researched methods to improve supply chain execution and meet demand.

"We needed a solution for automatic inventory tracking that could help us boost productivity, minimize stock accuracy issues, and prevent loss of goods," explains Erinda Lala, an On senior warehouse technologies specialist.

On was also looking for a solution that was easy and quick to implement, with low installation costs and flexibility to accommodate its ongoing growth. Open to embracing every technological

advancement, On soon forged a partnership with Verity, an AI and robotics company.

Since On and Verity are both headquartered in Zurich, Switzerland, and their offices lie in close proximity to one another, it was natural for the two companies to become acquainted. Verity's reputation and expertise in AI and robotics impressed the sportswear brand.

INITIAL TAKEOFF

In February 2024, the two companies embarked on a project whereby fleets of Verity's fully autonomous drones were deployed in an On warehouse to enable full operational visibility through smart, real-time inventory tracking.

"We opted to kick off the project by implementing a pilot solution in one of our largest U.S. warehouses," says Lala. Globally, On has warehouses in 12 countries as diverse as Japan, China, Australia, Belgium, the UK, Brazil, and Canada. It has two facilities in the United States.

“This initial phase will allow us to assess the effectiveness of the solution before gradually expanding to our other locations,” Lala adds.

A STEALTH APPROACH

For its part, Verity is on a mission to transform warehouse operations and optimize inventory management. The 10-year-old company came out of stealth mode at a TED conference in February 2016 and did a live demonstration of its ability to fly drones autonomously indoors. The presentation culminated with a swarm of drones flying over the audience.

Less than six months later, Verity did a proof of concept (POC) with a large U.S. retailer, demonstrating the use of drones to deliver automated inventory tracking.

“What we learned from doing the POC, was that there was a real demand for this capability, and our technology stack, while still best in class, was not mature enough

for large scale deployment,” says Raffaello D’Andrea, co-founder and CEO of Verity.

Verity went back to the drawing board and, over the next three years, created a second-generation system that is the basis for what now is used inside 80-plus warehouses operated by companies in 13 countries including the United States, Canada, Germany, and South Africa.

“Building on our track record of successful projects in Europe, we completed our first deployment in the United States with Maersk in late 2021,” says D’Andrea.

Basically, the Verity drones used in warehouses navigate to the locations they are scheduled to scan, collecting accurate inventory data in three dimensions by scanning barcodes at any height using onboard, high-resolution cameras.

When an electric-powered drone’s battery runs low, it autonomously lands and recharges while other drones fly off to continue the mission. It isn’t necessary for a dedicated human operator to be on-site and entire operation cycles can occur at night or on weekends with no need for overhead lighting.

The drones take photos of SKUs to identify inventory errors, such as missing or misplaced stock items. Once the data is collected, the system compares the findings with data stored in the warehouse management system (WMS) and then distills that information into critical insights delivered directly to users via a dashboard.

The results are cloud-based and shareable, and strengthen a company’s data accuracy to improve decision making quality and speed.

PIONEERING INNOVATION

On’s success is rooted in innovation. The brand’s own CloudTec technology propelled initial sales of its running shoes—and its subsequent growth—so it’s no surprise On would be open to deploying fleets of autonomous drones in its warehouses. The company’s primary goal is to establish precise inventory management without having to rely on manual processes.

“The accuracy of our stock levels serves as the foundation for maintaining product availability and facilitating sales across

CASEBOOK STUDY

Prone to Drones

CHALLENGE

On, a Swiss high-performance sportswear brand, sought to optimize its inventory management and enhance supply chain efficiency and precision to support its burgeoning growth.

SOLUTION

On partnered with Verity, a Swiss AI and robotics company, on a project to deploy fleets of fully autonomous drones in one of On’s U.S. warehouses beginning in February 2024.

RESULTS

Early results indicate the collaboration is already improving ON’s key performance indicators.

NEXT STEPS

The plan is to gradually deploy Verity drones in On’s additional 11 warehouse locations around the world.



Sportswear brand On leverages technology to support company growth by improving product availability at its physical and online stores, and maximizing order fulfillment by boosting on-time and accurate delivery.



Verity's automated inventory management system is powered by drones that scan inventory in warehouses and distribution centers and then deliver data-driven intelligence across the enterprise.

various channels, including direct-to-consumer, business-to-business, and our own retail stores,” explains Lala.

By enabling full operational visibility through smart, real-time inventory tracking, Verity's autonomous drones are minimizing stockouts, misplacements, and shrinkage across On's supply chain. The drones scan On products daily, ensuring full availability of stock for both retail and ecommerce customer fulfillment.

“Our system allows On to not only spot errors before they impact operations downstream, but to also determine root causes so they can be addressed,” says D'Andrea, who notes that manually tracking inventory is frequently a detested, error-prone, and even dangerous task due to the heights involved.

“Our solution also addresses the labor-shortage issues that many supply chain companies are witnessing,” he adds.

Harnessing innovation for the benefit of customer experience appeals to On because it reflects the company's own pioneering spirit and history. The sportswear brand is keen to get behind new, more sustainable supply chain solutions that reduce CO2 emissions linked to warehousing.

Verity clients net a reduction of 1,000 tons of CO2 emissions per warehouse each year, on average.

“By leveraging innovative technological solutions, we aim to improve our operations' efficiency further, become a more sustainable brand, and take customer satisfaction to new heights,” says Caspar Coppetti, co-founder and executive co-chairman of On.

DRONE ON

“It's hard to name an industry that wouldn't benefit from mobile intelligence,” says D'Andrea. Singling out factors that affect the business category, he points to the velocity of the goods, their value, the tightness and quality of the labor market, and the impact of errors in operations.

Verity counts retailers, third-party logistics providers, and manufacturers among its clients. The company is already deploying its autonomous drones to scan everything from pet food to groceries, shoes to household goods, electronics to machine parts.

Enhancing real-time inventory tracking across customer touchpoints—whether physical stores or online—minimizes stockouts, misplacements, and shrinkage. Drone technology boosts successful order fulfillment for companies by improving on-time and accurate deliveries.

Verity clients are seeing their operational issue rates drop from 5-12% to

less than 1%, significantly increasing their warehouses' labor efficiency.

But it's only the beginning. Many of Verity's clients are pulling the company into new verticals, including security and inspection.

It makes sense. To stabilize altitude, drones utilize air pressure sensors, which allow the hover capabilities needed for videography or photography. The sensors are small, lightweight, and low power, culminating in the perfect payload for a mobile platform that can move anywhere in space, on demand.

“Our cloud-based solution is also agnostic as to how the data it ingests is generated, so we can easily incorporate other data streams into our system, including those from fixed sources, or even mobile phones,” D'Andrea adds.

LOOKING AHEAD

Six months into its collaboration with Verity, On is currently assessing the performance of the pilot project in its U.S. warehouse to identify future opportunities.

“We found a partner who can support our warehouse in its core activities without adding manual work, and help streamline the process,” notes Lala. “We hope we're getting closer to our goal of a zero-error warehouse.” ■