



Inventory Management on 'Auto-Pilot'

The Startup Lab at GS1 Connect

GS1 Connect® is the annual user conference and exhibition hosted by GS1 US® that highlights the use of GS1 Standards to help drive innovation and business opportunities. Since 2019, the Startup Lab at GS1 Connect has been showcasing emerging technologies that provide GS1 US members with new ideas and solutions.

The Challenge

Over the past several decades, data analytics has reshaped enterprise decision-making. Despite copious data about consumer habits to inform advertising, storage, and procurement, warehouse operations remain labor intensive. The process of collecting physical inventory data and feeding it into analytics pipelines has remained slow, dangerous, and expensive. Workers must use forklifts to reach inventory stored in high places—often in poor conditions, including extreme conditions. In short, data about the goods often moves more slowly than the goods themselves.

In the face of these challenges—plus growing consumer expectations of two-day deliveries—companies need a way to bring the power of analytics to the physical world.

The Innovation

Gather AI has developed the world's first software-only inventory monitoring fleet of drones. This RaaS (robotics-as-a-service) solution consists of indoor flying drones, a proprietary autonomy engine, and a rich analytics and management software suite.

Featuring state-of-the-art robotics, computer vision, and deep learning, the autonomous engine enables a fleet of drones—using only their cameras—to map the environment, collect inventory data, count cases, measure temperature, and read barcodes without the need for additional warehouse infrastructure. Each drone is paired to a tablet device providing live inventory data with no need for network connectivity. The collected data can then be viewed directly on the tablet or on the web once it has uploaded to Gather AI servers via the app.



Third-Place Winner



Gather AI provides inventory monitoring and asset tracking solutions using a fleet of autonomous drones. These drones take off, scan inventory, land, and recharge with no human involvement. They are ideal for use in a wide range of industries, including Apparel, Consumer Packaged Goods, Foodservices, General Merchandise, and Grocery.

Gather AI was selected as the third-place winner of the 2020 Startup Lab Pitch Competition based on product originality, usability, societal impact, and other criteria. It emerged as the third-place winner among a field of eight (8) startups.

Technology Focus

Artificial Intelligence

Industry Application

Retail, Industrials, Robotics

“Our drones complete inventory checks at a rate 15 times faster than manual processes. Our customers pay for the platform on a service basis that is 60% cheaper than manual solutions and comes with no upfront costs.”

-Sankalp Arora

Gather AI, Co-founder

No other company offers a solution that uses 100% off-the-shelf drones or that works in so many diverse environments.

The Power of Partnerships

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When equipped with the right sensors, Gather AI's drones can:

- Perform physical inventory and cycle counts
- Measure temperature, volume, and humidity
- Report on rack conditions, inventory aging, and misplaced or damaged goods
- Inform a wide range of metrics, including space utilization, SKU mismatches, and asset path optimization

The worker who would previously be 25ft in the air on a scissor lift, holding a scan gun, can now work from the safety of a desk. The business benefits from more frequent hourly inventory counts at a lower cost and risk.

GS1 US's Role

GS1 US helps industry standardize the identity of parties, places, and things by issuing unique, persistent, globally interoperable identifiers. Those standards, developed in collaboration with industry, make it possible to provide a consistent, structured way to identify and describe products. GS1 Standards also prepare businesses for the next generation of technology. Technology innovations like Gather AI require large, accurate, and structured data sets to deliver maximum value.

To that end, GS1 US reviews and evaluates emerging technologies to put hybrid physical-digital identity concepts into practice that foster the adoption of converged identity across a spectrum of real-world use cases.

“Innovators like Gather AI represent one of the best sources of new ideas for using GS1 Standards to improve business performance and customer experience,” said Melanie Nuce, Senior Vice President, Corporate Development at GS1 US. “Innovations like these autonomous drones reveal what’s possible when we bridge the physical-digital gap for inventory monitoring and management.”

Perfect Your Pitch

Submit your information [here](#) to learn more about future opportunities with the GS1 US Startup Lab program.

About Gather AI

Launched in 2019, Gather AI provides data analytics and inventory monitoring solutions for warehouses via autonomous drones. Gather AI provides 10x faster, 24/7 inventory monitoring capabilities. It can also reduce workforce by 60%, saving \$1M a year in operations costs while reducing inventory taking time from 90 to 8 minutes for a single aisle.

For more information, contact:
gather.ai.

About GS1 US

GS1 US is a neutral, not-for-profit information standards organization that drives industry collaboration through the use of GS1 Standards—the most widely used supply chain standards in the world. The U.P.C.* barcode, the most recognizable example of a GS1 Standard used to power commerce, is scanned more than six billion times per day globally. More than 25 industries rely on GS1 US to uniquely identify products, places, and other assets, and GS1 Standards to create a foundation for emerging technologies that improve security, visibility, interoperability, and trust in the supply chain. Unique identification makes it possible to take advantage of the technologies of the future—connecting consumers, patients, businesses, and products.

For more information, contact innovation@gs1us.org or visit www.gs1us.org.

*In this publication, the letters “U.P.C.” are used solely as an abbreviation for the “Universal Product Code,” which is a product identification system. They do not refer to the UPC, which is a federally registered certification mark of the International Association of Plumbing and Mechanical Officials (IAPMO) to certify compliance with a Uniform Plumbing Code as authorized by IAPMO.

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