



WOODMAN'S

INDUSTRY

Retail

COUNTRY

United States

EMPLOYEES

550+

WEBSITEwoodmans-food.com**CHALLENGES**

- Automation of laborious shelf scans needed to quickly find mispriced, missing or misplaced products
- Increased demand to verify product accuracy following depleted inventory due to COVID-19 binge-buying
- Pinpointing product locations in large-format stores proved cumbersome for shoppers, online order pickers and staffers restocking products

SOLUTION

- Autonomous robots equipped with Badger® Retail InSight address out-of-stock, price integrity and planogram compliance issues
- Collaborative relationship expedited development of additional functionality, including precise product location data
- Unprecedented view into operational data tied directly to store performance

BENEFITS

- Shelf scans completed in hours, not days, with 95% accuracy in detecting OOS and 90% accuracy in detecting incorrect or mispriced products
- Precise product location data integrates seamlessly with mobile shopping app, enabling online order pickers, customers and store associates to find products quickly
- Increased accountability of DSD vendor performance tied to SLAs



Woodman's Markets Deploys Grocery Robots to Elevate Operations and Shopping Experiences

Badger Technologies® Autonomous Robots Help Keep Shelves Stocked and Stores Running Efficiently Despite Pandemic-Related Shopping Surges and Disruptions

For most of 2020, grocery stores—and their employees—have been on the front lines providing essential public services while addressing binge-buying, online shopping and supply chain disruptions.

As they strive to keep employees and customers safe, grocers are embracing robotics to automate manual processes and produce actionable insights to fuel better, faster and more profitable business decisions.

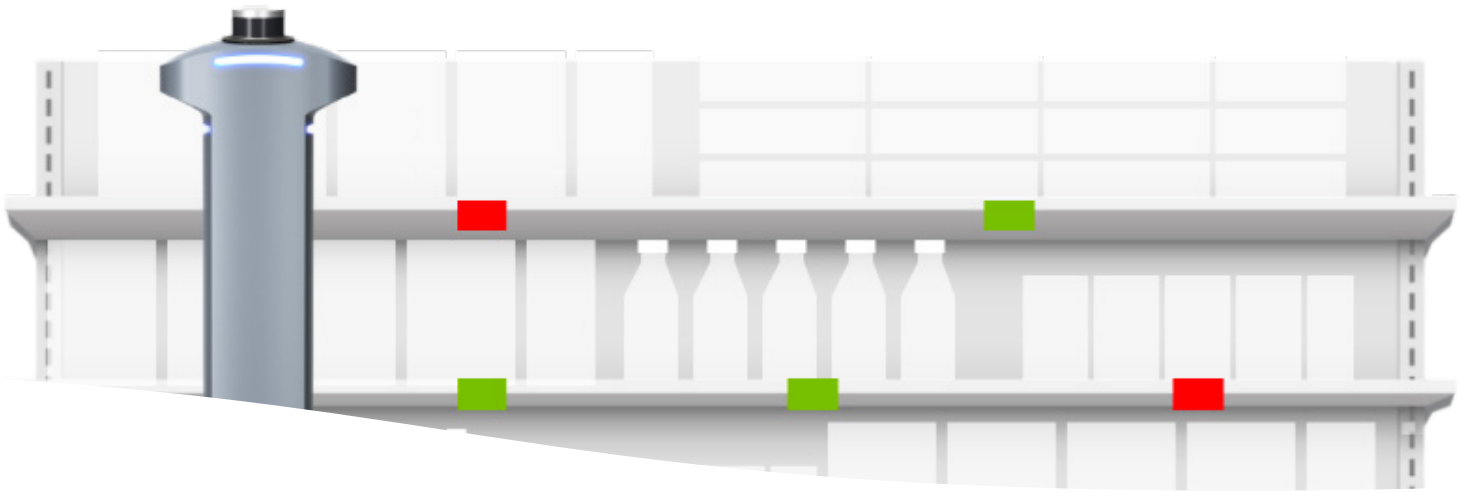
For Woodman's Markets, an employee-owned independent grocer with stores throughout Wisconsin and Illinois, the decision to deploy Badger Technologies® autonomous robots has produced immediate and long-lasting benefits.

A Legacy of Customer-Driven Solutions

Based in Janesville, Wisc., Woodman's celebrated its centennial in 2019. Founded by the Woodman family, most of the company's 18 stores surpass 240,000 square feet, nearly six times larger than the grocery industry average. More than 100,000 items are featured at each location.

While the chain is known for its methodical growth strategy, Woodman's is quick to adopt new technologies that improve operations and shopping experiences. For instance, Woodman's was the first store in Wisconsin to use UPC barcodes in the 1970s and recently has been testing electronic shelf labels (ESLs) and mobile shopping apps.

The move to robotics was driven by a desire for data-driven retail automation. When Clint Woodman, president of Woodman's Markets, encountered Badger Technologies, he was eager to see how an autonomous, multipurpose robot could support his stores' operations. Following a successful pilot, the decision was made to roll out Badger Technologies® robots in Woodman's stores.



The Price is Right: Automating Price Checks

The automation of storewide shelf scans for pricing compliance and out-of-stocks was the first requirement, driven by the need for real-time visibility into procurement and supply chain decisions. Prioritizing the replenishment of popular, “high-flyer” items was as important as identifying products that languished on shelves for months. An efficient, seamless solution was needed to automate shelf scans and eliminate laborious, time-consuming manual inspections.

Badger Technologies® autonomous robots perform shelf scans in **hours instead of the days** it often took staff to complete this task. Additionally, dramatic improvements in accuracy were achieved: **95%** in detecting out-of-stock items and **90%** in identifying incorrect or mispriced items.



“Pricing compliance is a huge deal,” says Tyler Davis, IT Project Coordinator for Woodman’s. “We want shoppers to see the price on the shelf and the price at the register ring correctly.” Accomplishing this was no small feat, as each store typically contains up to 24 aisles of products while up to 3,000 new sales tags are initiated daily.

Significant staff resources were needed on a weekly basis just to verify that price tags and shelf labels matched Woodman’s point-of-sale system. “We were able to capture the data needed to produce reports specific to Woodman’s pricing requirements,” says Andy Callahan, system architect for Badger Technologies. “As the robot visualizes the shelf, it collects points-in-time views and data streams to solve a host of problems.”

As a result, Woodman’s also quickly leveraged pricing data to flag discontinued items. “Prior to the robot, the pricing coordinator would have to leave their department for a week every month and scan item-by-item just to verify prices,” Davis remembers. “The robot now does this every single day and frees up 40 hours each month.”



The 'Anti-COVID' Robot: Verifying Inventory Accuracy

During pandemic-related binge buying in March, the team struggled to keep shelves looking full because of depleted stock and supply chain disruptions. To combat this, Woodman's filled shelf holes with similar products until they could be replenished, which led to an uptick in missing and mis-stocked items. The robot's data-gathering skills enabled the grocer to run mis-stock reports and compare this data to warehouse totals. An analysis quickly pinpointed misplaced and OOS items.

“ We called it the 'anti-COVID' robot as it helped us reconcile major inventory issues caused by filling holes on shelves with different products. Our autonomous robots undid the damage caused in March by enabling us to quickly identify and fix inventory problems. ”

TYLER DAVIS

IT Project Coordinator, Woodman's

In addition, Woodman's also wanted to improve planogram compliance by giving merchandise and category managers specific slices of data to manage third-party and direct service delivery (DSD) vendors. Now, Woodman's can look at a week's worth of data, determine if a vendor's product has been out of stock frequently and leverage that information to better manage SLAs.

Dynamic updates by store, category and CPG management give Woodman's store managers the insights needed to hold third-party vendors more accountable to buying trends and consumer preferences. "We've been able to create a scorecard for each merchandiser, so we can provide sales teams with tangible information when something needs to be addressed," Davis says.

Product Location: Find and Align with the Mobile Shopping App

Woodman's also asked Badger Technologies for assistance in attaining precise product location data. "These stores are the size of a couple of football fields," says Tim Rowland, CEO of Badger Technologies. "We can detect product location within a four-foot section of aisles that typically extend more than 100 feet. Then, we feed that data into a mobile app that customers use to improve their shopping experience."





The ability to keep track of product locations proved very helpful during the pandemic, as Woodman's integrated daily updates into their shopping app. "Location data can guide pickers and shoppers throughout the store more efficiently," Rowland adds. "Woodman's even uses this data to load pallets for faster delivery of products."

By sharing product location data with its distribution warehouses, Woodman's saves store employees several hours nightly as product pallets are organized based on the order in which they should be placed in store aisles. "Product location on the warehouse and supply chain side is unique as we are reducing breakdown time of incoming products," says Davis. "Also, the pricing department now is capable of organizing all of their pricing tags each day by location. If something moves, it's updated the next day."

Culture of Collaboration and Trust

A shared commitment to automation fuels the continuous collaboration between Woodman's and Badger Technologies. Transparency, teamwork and trust are keys to continued success. Weekly meetings focus on finetuning robot operations and exploring new opportunities for data collection.



Working with Badger [Technologies] has been one of the highlights of this project. We talk about different aspects of the grocery industry—things they haven't thought of or ideas they come up with that I didn't think of. It's a great partnership.



TYLER DAVIS

IT Project Coordinator, Woodman's

Woodman's positions the Badger Technologies® autonomous robots as team members while assuring store associates that the robots are meant to enhance—not replace—their jobs. With cameras and sensors helping the robots monitor the environment closely, other parts of the store are being explored, including fresh produce, frozen foods and the meat counter. Additional efforts are underway to reduce waste, improve efficiencies and further improve customer shopping experiences.

"The sky's the limit when it comes to the robot project," concludes Davis. "We dig all the time into other data just to see if there's another available piece of information that we can compare to create another report or improve another job down the line. We're open to any possibility with the robot at this point."