Husqvarna
Taking Inventory and Warehouse Management to the
Next Level with a Series of AppSheet-Powered Apps
Overview

The Husqvarna Group manufactures outdoor power products, including chainsaws, zero turn mowers, garden tractors, push mowers, and trimmers—with scores of parts and accessories related to them. In fact, the Swedish company’s largest North American Parts & Accessory warehouse houses more than 35,000 product SKUs.

Workers in that facility used to manage everything on paper—inventory, receiving, shipping, and other processes. But as Husqvarna grew, this type of system was not sustainable. Enter Mark Creighton who manages the giant warehouse.

His bold idea: automate the entire facility with a suite of custom apps built on the AppSheet platform. **Within 8 months, more than 41 apps have been built** to manage inventory, personnel, forklift drivers, goods reception, and quality tracking.

With the apps, Husqvarna was able to increase productivity, offer better visibility into key metrics, reduce mistakes, help motivate workers, and contribute to profitability. And there are more apps in the works.

“I don’t think it ever will be done because (it) just keeps growing. As soon as we put these apps on the floor and started using them, it just snowballed.”

– Mark Creighton
A Big Productivity Challenge

Clearly, team members in that 125,000-square-foot facility—which does 60 percent of all Husqvarna’s Parts & Accessory shipping in North America—have a lot to keep track of. Traditionally, warehouse workers did inventory, receiving, shipping, and most other processes on paper.

Workers would have to carry stacks of paper around the warehouse or amass little notes on their desks. They’d shuffle through files to find what they were looking for. And someone would have to enter all that data into a computer later on. These paper-based processes also made it difficult for Husqvarna to assess productivity and other key performance indicators.

As the company’s operations and desire to improve productivity grew, it became evident that its paper-based warehouse processes were not sustainable. So Mark Creighton, who manages the giant Columbia, S.C. warehouse, boldly suggested Husqvarna automate the entire facility with a suite of custom apps.

But he did more than that. After getting buy-in from leadership, especially his Director of Supply Chain, N.A. Chris Dulski, Creighton and his co-worker Erika Braxton created and implemented no less than 41 apps using AppSheet technology.

Before finding and utilizing AppSheet, however, Mark and Erika experimented with a different solution. “We really wanted to understand how can we know what folks are doing within this process,” he said. “So we created Excel files with scanners and little tablets, and it worked pretty good. It was pretty interesting. But it wasn’t ideal.”

The problem was that many of the approximately 160 warehouse workers—about half of which are seasonal pickers and packers—don’t have experience using Excel. So Erika spent a lot of time and effort fixing mistakes in Excel entries. Mark indicated Excel also impacted productivity because it doesn’t allow multiple people to edit the same document simultaneously.

A User-Friendly, Easy-to-Update Solution

The AppSheet interface is much easier for everybody to work with, says Erika. It also allows multiple workers to be in a document at the same time. And the no-code solution makes app creation and updates fast and easy.

That was important for Husqvarna because there were—and are—a lot of things Mark and Erika want to do to improve warehouse productivity. And AppSheet allows them to easily tweak existing apps as needed.

“The customizability makes such a difference because with AppSheet when I’m working on new projects and users tell me ‘Hey, this isn’t ideal. We need something to solve this problem.’ I [can] say ‘absolutely,’ and within 10 minutes they have their problem solved.”

– Erika Braxton
Mark adds that he was also happy to find a solution that integrates seamlessly with Google Sheets. In its move away from paper, he says, Husqvarna’s Columbia warehouse had already begun using Google Sheets.

**An Exciting, Rewarding Journey**

This solution wasn’t hard to find either. Mark came across AppSheet in February while doing a Google search.

That was pretty recently. So it may be hard to believe just two people have already built and rolled out 41 AppSheet-powered apps.

But that’s a fact. And every one of those apps has been updated too.

“As we continued to learn about different aspects of AppSheet, different functions, it was like a snowball. It just began to create more ideas. We would find something else that was really cool. And we still do today. The more we use it, the more we learn, the better we are.”

– Mark Creighton

To be honest, it hasn’t been a complete cakewalk. At first some people were hesitant to move from paper- to tablet-based work processes. And it took some tweaking to perfect some of the apps.

But the more work they did around the apps, the more people got used to it. And eventually workers and leaders were coming to Mark and Erika asking to work on the tablets and putting in requests for additional apps.

However, Erika says: “It’s been an incredible amount of fun. Mark and I were both very creative. It’s been a real ride.”

Right now, Columbia is the only warehouse using AppSheet for processes.

But Husqvarna has many U.S. warehouses, and several of those other facilities have begun using AppSheet dashboards and reporting. Mark also expects Husqvarna to employ AppSheet apps elsewhere in the world.

As you can imagine, the 41 apps cover a lot of ground. Here’s a sampling.
Digi Count
Husqvarna's 12-person inventory control cycle count team uses the Digi Count app to verify the number of parts in stock. In the past, counters would have a stack of papers with location information where they would not have an ideal path through the warehouse, count locations, and give the paper to someone at the end of the day for data entry.

“Now that we’re using AppSheet, it routes the counters through the warehouse based on the location,” says Mark. “They go count, and then they enter it. And then it gives them a time stamp, and then they sign it, and they can take a picture of it, and they don’t have to turn anything in.”

GoGRN 2.0
GRN stands for goods reception (or receipt) notice. Twenty-five to 30 people use this app. The receiving team uses it to record the receipt of products at the warehouse. GoGRN 2.0 helps the put-away team to store those products in an organized way.

Each entry notes the team member’s name, requires that person to sign the entry, and produces a timestamp. So there’s accountability. The app makes sure workers follow the prescribed processes. It does real-time tracking. And it eliminates paper process-related errors and waste.

Quality Tracking
With more than 35,000 different kinds of parts and accessories moving in and out of the Columbia warehouse, occasional mistakes in picking and packing are inevitable. So some warehouse workers are tasked with checking outbound shipments to make sure boxes don’t contain the wrong—or wrong amounts of—a product.

When they do spot mistakes, these individuals now use an AppSheet app to make note of it.

Six to eight quality control workers use the app itself. But about 80 pickers and packers—as well as Husqvarna’s customers—are impacted by this quality tracking effort.
**Track Lift**

The warehouse used to have a big wallboard showing who was using cherry pickers and forklifts at any given time. Now the Track Lift app provides that information.

The app provides 35 to 40 lift drivers and team leaders with more complete and accessible data about those 27 pieces of equipment. It lists who is on what lifts when, what condition they were in before and after use, and more.

It also allows people who are not in the lift area to check what equipment is there for their use, rather than requiring them to radio in a request as to availability. And it helps the managers in charge of this heavy equipment to decide whether and where to pull a needed lift if they’re all in use.

**WC Associates**

This personnel management app is not used on the warehouse floor. Instead, it's used by the leadership team and HR to keep track of those who work throughout the warehouse.

HR uses it to log new hires, note who they work for, what they're licensed to do, see who awarded and received gift card incentives and rewards, and more.
All the other apps pull from the WC Associates app, which is so named because the South Carolina warehouse is known as West Columbia.

Warehouse workers also have access to select features of this app. They can use an on-site tablet running the app to ask for time off and check their remaining time off.

A Means to Inform, Motivate, and Grow

These and Husqvarna’s other AppSheet apps have increased productivity, offered better visibility into key metrics, reduced mistakes, helped motivate workers, and contributed to profitability.

Mark estimates Digi Count has doubled the company’s productivity relative to counting. “And we do 60,000 cycle counts a year,” he says. “So it’s a tremendous impact on just that one process alone.”

The company’s Quality Tracking app, meanwhile, reduced quality incidents by 200 percent. “We’re finally able to be at the level we’ve wanted to be on this for so long,” he says.

And the AppsSheet analytics and dashboard actually enable Husqvarna to know at what level things are operating. “A lot of the metrics we didn’t have [before] because there was no way to get them,” he says. “All of the stuff happens naturally and automatically now.”
Some of that data is shared with workers via leaderboards. That’s been a big motivator for team members.

“If you show someone that you’re watching, they’ll pay attention to what they’re doing,” Erika says. And “they push a little harder because they want to be on the big screen.”

Mark estimates the AppSheet apps have produced 15 to 20 percent in savings. “It’s definitely contributing to profitability,” he says.

A Path to Ongoing Improvement

“In the local market there’s nobody doing what we’re doing today” in terms of warehouse management, Mark adds.

Of course, AppSheet allows Husqvarna to drive improvement without dedicated developer resources. That said, demand for new apps at the company has been so brisk that Mark and Erika have brought in a third person to help with app development.

“I don’t think it ever will be done because (it) just keeps growing,” says Mark. “As soon as we put these things on the floor and started using them, it just snowballed.”

Husqvarna Group is a global leading producer of outdoor power products and innovative solutions for forest, park and garden care. Products include chainsaws, trimmers, robotic lawn mowers and ride-on lawn mowers. The Group is also the European leader in garden watering products and a global leader in cutting equipment and diamond tools for the construction and stone industries. The Group’s products and solutions are sold under brands including Husqvarna, Gardena, McCulloch, Poulan Pro, Weed Eater, Flymo, Zenoah and Diamant Boart via dealers and retailers to consumers and professionals in more than 100 countries. Net sales in 2017 amounted to SEK 39bn and the Group has around 13,000 employees in 40 countries.

AppSheet was founded in 2014 by Praveen Seshadri and Brian Sabino. Currently, users in over 220 countries rely on AppSheet to help them create apps that fit their particular business needs in industries such as retail, construction and manufacturing, food and hospitality, sales, education, real estate, and IT services. This year, AppSheet was named a leader in Mobile Low-Code Development Platforms for Business Developers by an independent research firm.