

AHOLD DELHAIZE REDUCES PICKING ERRORS, INCREASES PRODUCTIVITY WITH HONEYWELL VOICE.

Case Study



**DEJAN ŠAROVIĆ, IT
SUPERVISOR, AHOLD
DELHAIZE:**

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Honeywell

OVERVIEW

Dutch-Belgian food retail group Ahold Delhaize operates a central logistics hub that replenishes 431 supermarkets across Serbia. Opened in 2014, the distribution center (DC) – located in Stara Pazova, Serbia, 40 kilometers (25 miles) northwest of Belgrade – houses dairy products, fruit, vegetables and dry goods products while operating three shifts of order picking for daily distribution to stores.

At 70,000 square meters (753,474 square feet), it is one of the largest DCs in the country. Every day, more than 500 trucks are loaded and unloaded at 120 docking stations and dispatched – all with an error rate of virtually zero – thanks to a 2018 investment in Honeywell Voice. Ahold Delhaize uses the voice-directed, order-picking solution to speed training, significantly reduce errors, and increase productivity.

BACKGROUND

Initially, Ahold Delhaize picked all products using RFID handheld barcode scanners. But in 2015, they decided to switch over to voice-directed picking in its two larger storage areas: fruits and vegetables, and dry goods (dairy products are still picked using handhelds).

“Raising productivity while not having to deal with the customary functionalities of the previous solution was extremely important to us,” explained Nemanja Ivković, Ahold Delhaize’s distribution center director. To ensure a smooth, swift implementation, Ahold Delhaize worked with IT service provider Špica Sustavi and the Honeywell Voice team to implement the voice solution after visiting several reference sites with existing installations.

“One of the greatest advantages of voice picking is the fact that our employees have both hands free for their work and are given clear instructions,” noted IT supervisor Dejan Šarović. He added that the system was easy to understand and training periods were extremely short. “New pickers are ready to work after only



one to two hours, which delivers a time advantage of more than 60 percent compared with handheld order picking.”

SOLUTION

Personal Voice Profiles for Each Worker

An integral part of the short training period is a one-time setup of each individual’s voice profile in their customary working environment. In this phase, which takes around 30 minutes, each employee speaks the instructions and commands used at Ahold Delhaize into the headset’s microphone in his or her own personal tone and dialect. This data is stored in the system and then used in the subsequent communication between the picker and the Honeywell Voice solution. As soon as their voice profile has been created, the employee

can start working. After a few days of on-the-job training, the picker is fully productive, which dramatically reduces the orientation period compared with the previous system.

In a joint collaboration with Špica Sustavi, Ahold Delhaize developed efficient, voice-controlled workflows. The operation uses 140 Honeywell Talkman A730 voice terminals, along with the same number of cordless SRX-2 series headsets. Approximately 50 of the devices are used for put-to-store picking. This process involves transferring the fruit and vegetables delivered on pallets early in the morning and selected within a few hours for each individual supermarket, while maintaining the strictest quality standards.

QUICK FACTS

Honeywell Solution

- Honeywell Voice
- Customer: Ahold Delhaize
- Location: Stara Pazova, Serbia
- Industry: Grocery/Food
- Website: www.aholddelhaize.com

Customer Results

- Minimized error rates
- Increased productivity through targeted optimization of picking routes and times
- Reduced picker onboarding and training to 2 hours, a 60% improvement
- Enabled accurate multi-order picking and mixed pallet building

Why Ahold Delhaize Chose Honeywell

- Recommended by logistics partner Špica Sustavi
- Visited multiple reference sites with existing voice installations
- Ability for workers to have both hands free while given clear instructions

Elimination of Picking Errors

As part of the order fulfillment process, the warehouse management system (WMS) receives orders from the 431 store locations, then calculates the optimal picking sequence. Instructions are transmitted by VoiceXtreme, a middleware developed by Špica Sustavi, translated into specific pick orders, and sent via WLAN to the voice terminals. Each voice terminal converts the data into voice commands, which are then sent by Bluetooth® to the headset of the operator. Commands can be repeated if necessary.

Ahold Delhaize's put-to-store picking process is considered unique in the logistics sector, and there are only a few warehouse management systems capable of managing it. The first step involves transferring the full pallets delivered in the morning to a level storage place with a barcode where they are then "married" by scanning in their new position. At the same time, the empty pallets calculated for each customer order are delivered individually to picking zones, with each of these pallets having its own barcode.

This enables the WMS to direct the order pickers accurately — via VoiceXtreme and Talkman devices — to the full pallets needed to initiate the picking process.

Once the full pallets are picked up, the order picker receives instructions via their headset through a specific sequence to the available empty pallets. Once there, the order picker first reads aloud the check digits, which are immediately confirmed by the Talkman. Then the voice system informs the picker of the exact quantity of product to move from a full pallet to its destination on an outbound mixed pallet.

"This system practically eliminates errors when loading the mixed pallets," emphasized Ivković.

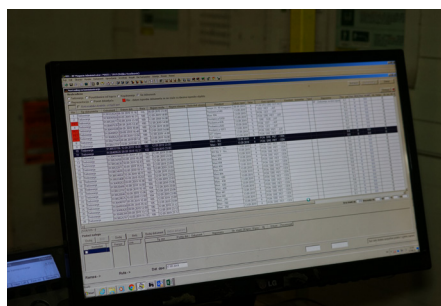
Seamless Integration With Other Picking Systems

Dry product picking in the facility combines voice technology with barcode scanning and a put-to-light system for virtually error-free, multi-order picking. Low-lift order pickers deployed in this area of the warehouse are equipped with long forks and green and blue LED spotlights. The spotlights are positioned at a distance

of 1.20 meters (4 feet) along the lifting forks above the individual pallet.

After the voice-guided pickers speak the correct check digits on the rack location, a beam of light marks the pallet assigned to the respective order. An additional display mounted on the light bar shows the quantity of articles to be retrieved. "This enables the picker to clearly recognize the order to which the correct pick position belongs," Šarović commented.

Other special features of the solution include integrated checking of the goods to be delivered to the picking station. Before the first container of a new pallet is picked, the system requests the numbers of the barcode attached to it. When answering, the picker can choose whether to read out the last four digits of the barcode or use the scanner integrated into the Talkman instead. Typically, employees use the Talkman, which must be removed from the vehicle mount for this purpose. Thanks to integrated Bluetooth, the device can remain in the mount in all other picking scenarios, making the work easier.



BENEFITS

Honeywell Voice delivered numerous benefits to Ahold Delhaize's Serbian distribution center:

- Picking performance increased through targeted optimization of picking routes and times.
- Error rates dropped to virtually zero.
- Employee onboarding has been reduced by 60% to 2 hours.
- Data analysis enables process optimization.
- Increased accuracy of both multi-order picking and mixed pallet building.

Another advantage the Honeywell Voice solution gives Ahold Delhaize is the ability to analyze data collected about

the picking processes. Managers now can calculate exactly how much time is taken up by picking, moving around the warehouse and other activities. "We found out that only one-third of the hours worked was taken up by picking and two-thirds by moving between the aisles," Šarović commented, noting the company plans to substantially improve the pick proportion.

Thanks to the implementation of Honeywell Voice, Ahold Delhaize ensures quality to the highest possible standards and a low error rate through the processes developed in-house. Moreover, the information generated and documented based on the system provide an excellent database for in-depth analyses and further optimizations going forward.

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