



CASE STUDY

FERGUSON TRANSFORMS PICKING OPERATIONS

Replacing previous voice solution with LYDIA Voice from EPG enables Ferguson to optimize workflows and deploy Android devices, saving time and money.

Ferguson — the largest wholesale distributor of residential and commercial plumbing supplies and pipe, valves and fittings in the U.S. — was well acquainted with the benefits of voice-directed hands-free, eyes-free order picking. Several of its North American distribution centers (DCs) were using voice technology to more quickly and accurately locate and pick items from among the 200,000-plus stock keeping units (SKUs) stored on average in each DC.

However in 2020, the company's operations managers decided it was time to consider other alternatives. Their previous voice solution was tied to specific, supplier sourced-hardware and unable to support other devices. Additionally, it required an extensive amount of voice-template training to teach the system a new associate's voice and speech patterns during onboarding. For a company with multiple locations and a huge workforce — many of whom speak a language other than English — this was both time consuming and challenging.



CHALLENGE

- Previous voice-directed picking system obsolete
- Wanted system that understood multiple languages with less extensive voice-training time
- Preferred a voice system that was hardware independent
- Required solution that interfaced with HighJump WMS



SOLUTION

- Provides deep neural network technology for accurate voice recognition of more than 50 languages and dialects
- Supports broad range of devices running Android operating system
- Software seamlessly interfaces with HighJump WMS, no custom programming needed



RESULTS

- 8 DCs transitioned to LYDIA Voice in 2021
- Deep neural network voice recognition allows new employees to be trained 75% faster
- 25% increase in productivity
- Two multi-purpose mobile devices have reduced technical support, maintenance, and upgrade needs

“The pilot addressed every concern we had, as well as demonstrated that we could take advantage of features we never had access to before. It was a very easy and obvious decision to make the switch to LYDIA Voice.”

Head of Operations at Ferguson Enterprises LLC

“While we liked the hands-free, eyes-free capabilities of our old voice system, the hardware was expensive and the software only supported those devices,” explained the head of operations. “We also have a great deal of diversity in our workforce, and for workers to be most efficient when picking, it’s important that they be able to speak in their native tongue. The old voice system simply didn’t understand a significant portion of our workforce, which meant we had to find verbal workarounds for each affected user.”

SUCCESSFUL PILOT

EPG, a leading global provider of supply chain execution and voice software solutions, offers the LYDIA Voice Prove It Program, an opportunity to pilot the solution. During the pilot, Ferguson’s existing voice-directed workflows were duplicated at one of the company’s facilities. Operations managers ran the system for 45 days to assess its functionality as well as to verify that LYDIA Voice would indeed interface easily and successfully with the company’s existing HighJump warehouse management system (WMS).

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ABOUT THE SOLUTION

Device independent, LYDIA Voice is capable of supporting a variety of Android mobile computers from multiple manufacturers. This enabled Ferguson to standardize on two multi-purpose mobile computers, the ET51 tablet and the WT6000 wearable from Zebra. The units use Bluetooth to connect wirelessly to the Zebra HS3100 headset worn by a worker and a Zebra RS5100 hands-free barcode scanner.

Because LYDIA Voice incorporates deep neural network voice recognition technology, it is capable of automatically recognizing more than 50 different languages and a broad range of unique dialects. This makes it ideal for warehousing and fulfillment operations, such as Ferguson’s, where multiple languages are spoken. LYDIA Voice eliminates time-consuming, voice-template training, streamlining onboarding for new, temporary, and full-time workers leveraging voice technology, saving considerable time and resources.

The pilot also verified that LYDIA Voice seamlessly interfaced with Ferguson’s HighJump WMS, due to the system’s real-time telegram client. Overall, the entire initial implementation at the pilot facility went smoothly. After engaging EPG to assist their operations teams with the LYDIA Voice deployment at a second facility the company rolled out the next six installation sites with minimal, remote support from EPG.

THE RESULTS

Since making the decision to switch to LYDIA Voice, eight of Ferguson’s DCs have deployed the solution.

Due to LYDIA Voice’s deep neural network voice recognition technology, new and temporary associates can now be trained on the LYDIA Voice system in minutes. This resulted in a 75% decrease in training time, which translates to a 25% increase in productivity.

Further, because of LYDIA Voice’s ability to support Android devices, Ferguson’s decision to deploy two Zebra devices capable of handling multiple tasks has significantly decreased their technical support, maintenance, and upgrade demands.

ABOUT FERGUSON ENTERPRISES LLC

- Largest wholesale distributor of residential and commercial plumbing supplies in U.S.
- Stores more than 200,000 parts per warehouse
- Annual sales of \$22.8 billion
- More than 1,600 locations worldwide