

Vocollect Case Study

Connect Distribution



How moving to voice-directed technology helped to increase capacity and enable faster warehouse performance at a growing UK-based domestic appliance and parts distributor

Voice Results

Objectives

- Manage demands of rapidly expanding business, particularly in the domain of e-commerce
- Improve labour management
- Increase productivity
- Increase accuracy

Application

- Order Selection
- Putaway

Installation

- Vocollect Talkman T5 and SR20 headsets linked to custom built warehouse management system (WMS) via VoiteQ Voiceman® middleware

Results

- 20-40% increase in productivity
- 85% increase in accuracy

ROI

- Within 12 months

With 40 years' experience in the industry, Birmingham-based Connect Distribution Services Ltd understands the complex requirements of the domestic appliance market, as well as the challenges and opportunities that e-commerce brings. The family-owned business supplies retailers, manufacturers, insurance companies and B2B firms with domestic appliance spares and accessories for white goods such as washing machines, freezers and tumble dryers, as well as electronics accessories to the consumer market.

Connect Distribution holds approximately 100,000 product types on site and has access to around 1.5 million lines. The firm is based at a six-acre national distribution centre (NDC) which processes over 180,000 orders on average per month, for customers throughout the UK, Europe and further afield.

The Challenge

Finding a solution to support current and future growth

In recent years, Connect Distribution has enjoyed considerable growth, particularly in the e-commerce aspect of the business. The company currently supports over 200 websites, including a partnership with Dixons for its electrical spares and accessories site; partmaster.co.uk. Connect Distribution also operates major industry sites such as buyspares.co.uk and 4ourhouse.co.uk, which supplies original equipment manufacturer (OEM) parts direct to consumers, as well as its own branded products such as Wellco and Electruepart.

To accommodate its growing logistical requirements, the company opened up a series of ground floor rooms in its warehouse, developed new packing areas and technology, built a new 2,000 location bulk pallet store and recruited additional staff. As part of this development of its site, in 2010 Connect Distribution added voice technology to the operation with the aim of improving labour management, increasing productivity and improving accuracy in Connect Distribution's demanding and fast-paced pick process.

"The complex nature of supplying small parts and accessories has huge potential for error, as it is easy for pickers to select the wrong item. Our voice-based picking system has provided vast improvement in this area. Customers want the exact item they have ordered on time and in good condition. While it's impossible to achieve perfection, the service we have developed comes extremely close to it. Overall, the gains we have seen in productivity and accuracy resulted in a return-on-investment from the whole implementation within just one year which blew our initial expectations out of the water."

Iain Priestley
Director of NDC Operations
Connect Distribution Services Ltd

The Solution

The voice picking solution was developed and installed by VoiteQ; a dedicated Total Solution Provider of Vocollect Voice technology. The company opted for VoiteQ's middleware – VoiceMan® - to link Vocollect devices – Talkman T5 computers and SR20 headsets - to its custom built warehouse management system (WMS) and provide improved labour management reporting to the business.

The pick-to-tote logistics system, used by the company, services up to 14 orders within a single tote. The amount varies according to whether it is a trade, consumer, single or multi-line order. When a tote passes a barcode reader, it is automatically diverted to the relevant picking zone. This in turn updates the WMS and instructs the picking to take place via a voice command.

In a typical conveyor-based operation, the tote is pushed out into each zone, the number is read into the voice system and the pick instruction is then generated. The innovative system used at Connect Distribution has been further configured to operate by priority, automatically directing the picker to the most urgent pick and enabling the company to fulfill a high volume of next-day deliveries.

Familiar with the proven productivity and accuracy gains associated with voice, Connect Distribution's Director of NDC Operations, Iain Priestley, first commissioned VoiteQ to run a trial of the VoiceMan and Vocollect Voice technology in September 2009. "To start with, voice was rolled out in a trial section of the NDC," he said.

"Initially, our pickers were a little concerned that they wouldn't be able to adapt to the verbal instructions. Yet, within just a few days, everyone had increased the speed setting they receive from the Talkman's voice commands. After two weeks they were working at the fastest setting."

After a successful trial, Connect Distribution decided to take voice to a full implementation in its conveyor picking zones. Impressed by the technology's success rates, the firm replaced the existing label-based picking method in 2010, during one of its busiest periods and in the summer of 2012 extended voice into its putaway operation.

By selecting the Vocollect Voice technology, Connect Distribution is using trained voice-recognition software which means each user's unique tone and dialect is recognised for complete accuracy.

Once up and running, pickers at Connect Distribution required minimal support and quickly increased the productivity of the operation. Priestley believes that the new voice system has played a substantial role in the rapid growth that the business has seen, owing to its simplicity and speed.

The Results

"In year one, we achieved annual productivity gains of between 25 and 40 per cent, which exceeded our initial prediction of 20 per cent. Now in year two, the combination of voice technology and better overall performance management has meant our productivity has increased still more. We are now seeing an 85 per cent improvement over our old manual system.," said Priestley.

The use of voice technology has also helped the company build on its quality delivery promise to customers, who have also seen a vast improvement in the accuracy of every order. Previously there would typically have been one error for every 200 manual picks. Since moving to voice, the team now average one error for every 800 voice picks; representing a 76 per cent gain in accuracy.

"The complex nature of supplying small parts and accessories has huge potential for error, as it is easy for pickers to select the wrong item," added Priestley. "Our voice-based picking system has provided vast improvement in this area. Customers want the exact item they have ordered on time and in good condition. While it's impossible to achieve perfection, the service we have developed comes extremely close to it. Overall, the gains we have seen in productivity and accuracy resulted in a return-on-investment from the whole implementation within just one year which blew our initial expectations out of the water."

Currently, Connect Distribution use voice for order picking and putaway. Next Priestley hopes to extend the application of the technology to include storage and stock control, as part of the company's strategy to expand its premises and WMS.

"Voice has undoubtedly become a mainstream warehouse technology," Priestley concluded. "Yet, in our relatively traditional industry, implementing it has given us an edge compared with other distribution companies. Crucially, it has enabled us to deliver a higher quality of service and fulfill the high degree of same-day dispatch orders we receive."



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About Vocollect

In the complex supply chain industry, accuracy and productivity are of paramount importance. The proven track record of voice in driving quantifiable performance improvements has made it a natural fit for process reengineering efforts to solve key business challenges. Vocollect, a business unit of Intermec, Inc., is the number one provider of end-to-end voice solutions for mobile workers worldwide, helping customers achieve a higher level of business performance.

Together with our partners, we enable almost 500,000 workers at nearly 2,000 companies around the globe to distribute US\$4.5 billion in goods every day. Contact Vocollect today to learn how we can help you transform your operational and workforce performance. For more information, visit www.vocollect.com.