

Media Release:

Dematic and Vocollect deliver a decade of sound supply chain solutions

There has been a lot of technology innovations implemented across the supply chain over the past decade. However, few have created bottom line savings and competitive advantage as consistently as voice-directed technology.

Since Dematic introduced voice picking to Australia 10 years ago, hundreds of companies have embraced the concept, increasing productivity, accuracy and throughput, reducing labour costs and enhancing workplace safety.

Dematic now supports more than 7,000 voice users in the field across a wide range of logistics applications such as 3PL, Pharmaceutical, Apparel, Discount Variety, Food, Beverage and Ports.

The cold storage industry was the first to implement voice picking, quickly realising the productivity and OH&S benefits that hands-free, eyes-free order picking delivers.

The first Voice Picking application in Australia

Dematic's installation for Versacold (formerly P&O Cold Storage) at its Murarrie DC in Brisbane, proved to be a highly successful full case picking application.

Since its initial implementation, Versacold has rolled out voice technology to various sites and has upgraded its initial systems to new fourth generation Vocollect hardware.

After voice picking had proven its potential in the field, high volume retail distributors led by Metcash soon began national rollout programs in many key distribution locations in Australia and NZ. Most major retailing groups in Australasia including Woolworths, Coles, Progressive and Foodstuffs have now implemented voice picking projects.

Voice has now established itself as the first choice solution for both full and split case picking, with most users achieving productivity gains of 10 to 25%, compared to RF picking.

Voice outperforms RF Picking

One of the best proving grounds for comparing the performance of voice picking to RF picking was at Dick Smith Electronics (DSE) national DC in Sydney.

Dematic's General Manager of Real Time Logistics, Nathan Taylor, said: "The logistics industry had been waiting for an application like DSE that gave us the opportunity to directly compare the performance of RF and Voice Picking, and the results were outstanding."

Within its first six months of operation, Dematic's voice picking solution had already delivered DSE with a substantially better than expected productivity gain of over 20%.

DSE's National Supply Chain Manager, Alan Hicks, was impressed with the results.

"We knew voice picking would improve our order picking productivity, but not to the extent it has," he said.

DSE had been using RF Picking and was achieving excellent order accuracy rates of 99.7%, but needed to find a way to increase productivity to reduce costs and increase throughput capacity.

"After seeing voice picking in operation at a number of other Dematic customer sites, we decided it would be a great fit for our application," said Alan Hicks.

DSE budgeted on a 5-7% productivity improvement in picking.

"It appears we were a bit conservative in our thinking," said Mr Hicks, "because within the first month, we were already achieving a productivity improvement of about 20%."

“One of the concerns we had when evaluating the suitability of voice picking for our business was whether or not we could maintain the high picking accuracy we achieved with RF picking, which was typically over 99.7%, so we thought there was little voice picking could do to improve on that,” added Mr Hicks.

“But I am delighted to say it did, with our accuracy rate continuing to trend upwards following the implementation of voice picking,” he said.

Facilitating alternative Order Fulfilment strategies

In traditional retail DCs, the normal practice is to assemble a complete store order at a time. In a project which demonstrated the flexibility of voice picking, Dematic used the technology to facilitate a high volume ‘Put’ order fulfilment system for discount variety retailer The Reject Shop, at its new national DC in Melbourne.

Instead of transporting the whole order around the DC and picking products one at a time, Dematic’s voice picking and ‘Put’ solution enables The Reject Shop to batch pick all of a single product for all of its store orders at the one time.

“For example, if we are processing orders for 123 stores, we may require four pallets of chocolate bars to allocate the required stock for each store,” explained the retailer’s General Manager of Logistics, Philip Beckett.

“The voice picking system instructs the pickers to retrieve four pallets from bulk reserve storage, and those pallets are then taken to the ‘Put’ zone,” he said.

The ‘Put’ zone is a 4500m² area of the warehouse that is broken up into sections representing the stores, with larger stores having larger areas dedicated to them than the small ones.

Directed by the voice picking system, the pickers transport the batch-picked products on pallet trucks, stopping at each store location where products are required, and ‘Put’ the required quantity of product to pallets representing each individual store order.

The pickers continue allocating products to each store where required, until there is no more stock on the pallet truck. The pickers are then assigned another task by the voice picking system.

“We worked closely with Dematic to develop a voice picking system that matched our particular order processing requirements,” said Mr Beckett.

“The fact that people can work with both hands and eyes-free is a big advantage compared to paper-based order picking,” he said.

Voice Picking suitable for all sizes of operations

“Over the past couple of years, we have seen strong growth in the uptake of voice picking by a whole second tier of voice users,” said Dematic’s General Manager of Real Time Logistics, Nathan Taylor.

“Increasingly we are seeing manufacturers, importers, wholesalers and distributors turning to voice technology to improve productivity, throughput and accuracy.

“Take Provet in Brisbane for example,” said Mr Taylor.

Dematic included 10 voice picking terminals as part of an integrated logistics solution for the veterinary products distributor’s new Queensland DC at Northgate in Brisbane.

Provet’s General Manager, Glenda Sinclair-Gordon, said: “We service about 300 vet surgeries throughout South-East Queensland from the DC and they rely on us to turn around orders quickly and accurately.

“Some urgent orders are processed same day, while less critical ones are next day. Our customers have come to expect a very high level of service from us.

“We weren’t particularly automated in our approach to warehousing, with our previous operations being largely manual and paper-based,” she said.

Dematic worked with Provet to integrate voice picking with the company’s WMS. Orders arrive via EDI, phone and fax, and are uploaded to the WMS.

This downloads the orders to Dematic's PickDIRECTOR, which controls and manages the picking process.

According to Glenda Sinclair-Gordon, the company's warehouse staff have embraced the new technology and it has had a major impact on the workplace.

"With the previous paper-based system, pickers spent a lot of time walking to collect the orders. Now, with voice picking, we literally take the orders to the picker, which has certainly helped increase productivity," she said.

"Picking accuracy has also increased. With the previous system we had to double check every order. This isn't necessary with voice picking, which further boosts efficiencies.

"We are hopeful that future growth will be managed by existing staff levels and this will be another major benefit of the technology.

"We are extremely happy with Dematic's solution and look forward to servicing the needs of our customers with greater efficiency and better accuracy than ever before."

The evolution of Voice Picking technology

"At first the idea of a computer telling a warehouse operator where to go and what to pick sounded like Science Fiction, however, Dematic could instantly see the benefits of hands-free, eyes-free in order fulfilment applications and searched the world for the best technology vendors," said Dematic's Nathan Taylor.

"In selecting our voice technology partner, we considered speech recognition accuracy, systems integration, industrial suitability and company stability. We found that Vocollect was the only vendor who could offer a 'speaker-dependent solution', which provides very fast and accurate speech recognition in noisy, industrial environments, regardless of the user's background or accent. Vocollect also offered direct interfaces to most leading WMS systems, negating the need for middleware or stand-alone integration software.

“Since we started working with Vocollect, we have seen many voice companies come and go in the supply chain vertical. It’s a challenging space to deliver a robust solution,” he said.

As voice-directed technology continues to mature, implementation costs have dropped, reducing the payback period to less than twelve months in some applications.

“We’ve seen some customers achieve a return on investment (ROI) of less than a year for voice picking applications with anywhere from two to 200 operators per site,” said Mr Taylor.

Advances in voice hardware and software have also increased the performance and functionality of voice picking, while reducing investment requirements.

Vocollect Talkman hardware has become smaller and lighter and now offers full wireless integration, including wireless headsets.

“Vocollect systems are also developed on open standards that allow Vocollect voice picking application software to run on third party hardware,” added Mr Taylor.

“Users are no longer required to invest in Vocollect hardware only, as Vocollect voice picking application software can now run on LXE, Motorola or Psion Teklogix hardware.”

Asian language support has also become available and Dematic is starting to implement voice picking across the ASEAN and China regions.

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