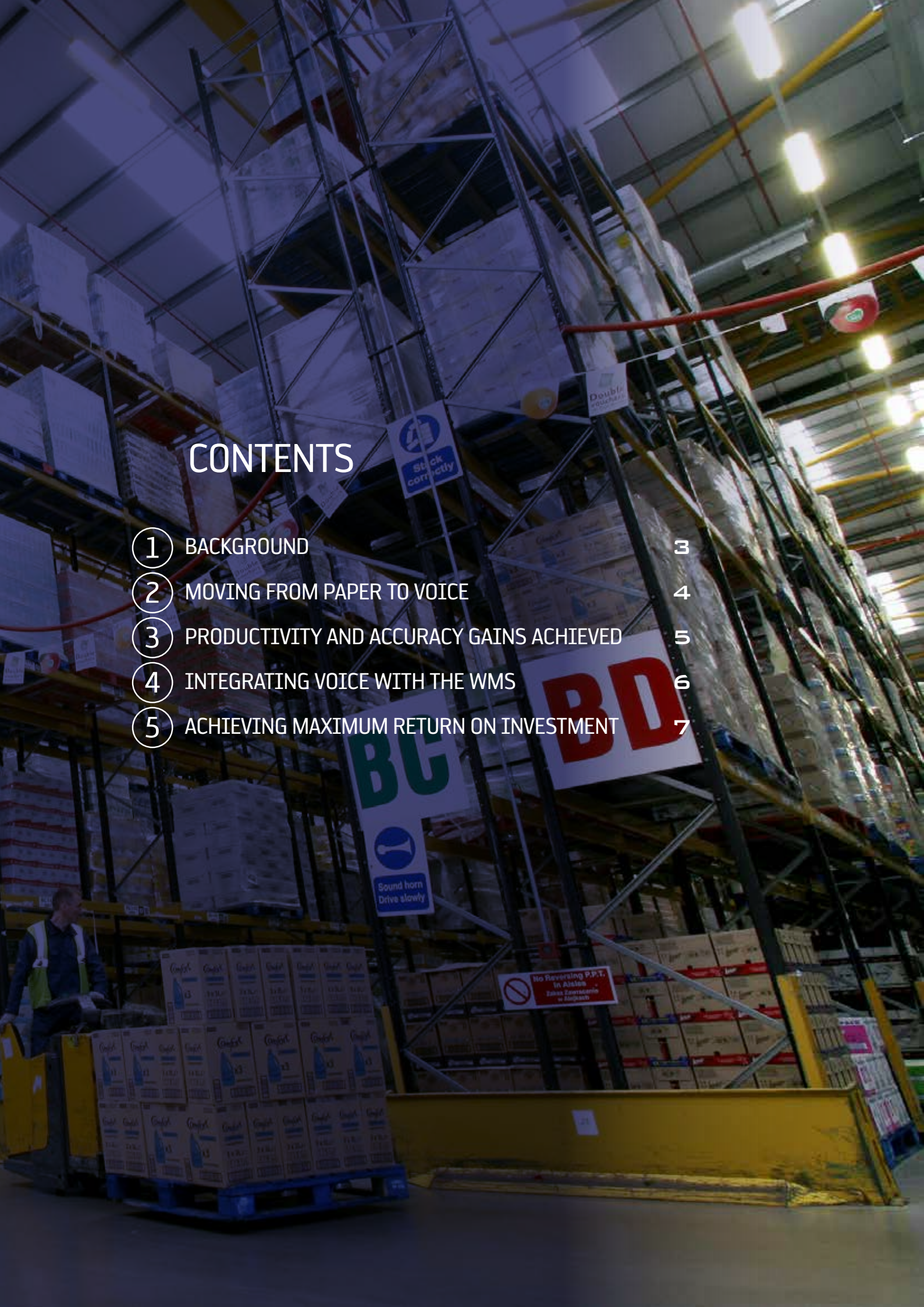


Choosing the Best Technology for Your Warehouse

MUSGRAVE RETAIL PARTNERS IRELAND

CASE STUDY

Implementation of voice picking within grocery retailer, Musgrave Retail Partner's four warehouses in Ireland to improve productivity and accuracy.



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Founded in Cork, Ireland in 1876 today Musgrave is one of Ireland's largest and most successful companies with annual sales approaching 4.6bn Euros. With its retail partners it employs more than 44,000 people and has 1360 stores. Its supply chain delivers to 686 stores in the Republic of Ireland with 3400 deliveries a week. The company has 4 warehouses that total 580k square feet, and packs a total of around 2 million cases each week for distribution to its network of retailers across the UK and Ireland.

The company stores products across each warehouse that consists of ambient, chilled and fresh foods. A customer of Worldwide Chain Stores (WCS) for many years, Musgrave has been using WCS's Warehouse Management System for 18 years and gaining the value of a functionally rich system that continues to support the needs of the business.

Having used technology to its advantage to maximise its growth opportunities for a number of years, in 2007, driven by the desire to further improve accuracy and efficiencies the company embarked on a process to review the value of integrating voice technology for picking within its warehouse environment.

- EMPLOYING MORE THAN
44,000 PEOPLE
- 1,360** STORES
- €4.6 BN** ANNUAL SALES
- 3,400** DELIVERIES PER WEEK
- 1,500** OPERATIONS STAFF
ACROSS **6** DC'S
- FLEET OF **170** TRACTOR
UNITS AND **450** TRAILERS
- 440** SUPPLIERS
- 8,800** AMBIENT LINES
- 4,800** CHILL LINES
- 700** FROZEN LINES

1

BACKGROUND

2

MOVING FROM PAPER TO VOICE

The existing paper-based system at that time was complex and prone to error. Typically, orders within the ambient warehouse would come directly into the warehouse from its network of retail partners, and would be split into paper picking orders then divided by section across the warehouse.

Each assembler or picker then had to pick up to a three cage assignment and drive through the warehouse picking items according to the list, before delivering the paperwork back to the onsite office. Any amendments would be made by office staff for that operation. Within the chill warehouse a pick-to-zero operation was in place, and the very nature of this operation meant it was hugely paper-based with pick labels generated for the picker to follow and label cases to be loaded onto a container. Both systems across ambient and chilled were prone to error, with no checks in place to catch discrepancies, the company realised investment in new technology was critical.

The review process involved visiting other retail sites to gain insights into the use of different technologies including RF and pick to light.

The company embarked on a test project at its Cork facility to assess the impact of voice picking on accuracy, productivity and retailers and would allow it to determine an implementation timetable for a full roll out of voice picking across its operations.



**“ AFTER
A THOROUGH
EVALUATION WE
REALISED THAT VOICE
DIRECTED PICKING OFFERED US
THE MOST VERSATILITY WITHIN
OUR OPERATION. IT COULD BE USED
ACROSS NUMEROUS PARTS OF THE
WAREHOUSE INCLUDING LOADING,
RECEIVING AND PICKING AND WAS
A PERFECT FIT.**

**- BRENDAN FITZGERALD,
INDUSTRIAL ENGINEER,
MUSGRAVE.**

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PRODUCTIVITY AND ACCURACY GAINS ACHIEVED

Musgrave saw some early benefits from its voice implementation. Fitzgerald commented, “When we moved to voice-directed picking for both chilled and ambient, one of the key immediate benefits was allowing the picker to be hands-free, so that they were no longer carrying around papers and pens and ticking boxes. The headset meant they were able to hear all the information required, and were able to query anything they needed to. Within ambient specifically, the picker was able to confirm he was in the correct location before picking, which immediately had an impact on errors. The improvement in accuracy and productivity was substantial.”

The new voice directed system has allowed for a much more ‘free flowing’ environment, where productivity gains have seen an 8.2% lift. Not only that but with accuracy increasing, there have been savings in overall head count as the business is able to be more lean with its staff needs and today has reduced the number of warehouse staff significantly since the implementation of the project. Ultimately within the retail environment, deliveries are now no longer needing to be checked, and as a result goods are reaching the shelf quicker, and shelf availability has increased.



**“ WE’VE BEEN ABLE TO
ACHIEVE 99.8-99.9%
ACCURACY, WHICH LEAVES
VERY FEW ERRORS WITHIN OUR
OPERATION CRITICALLY AT THE
RETAILERS BACK DOOR, WHERE THEY
HAVE BEEN ABLE TO ELIMINATE THE
COSTS ASSOCIATED WITH HAVING TO
CHECK ALL DELIVERIES AND SO ARE
ABLE TO POSITION STAFF IN MORE
CUSTOMER FACING POSITIONS**

**- BRENDAN FITZGERALD,
INDUSTRIAL ENGINEER,
MUSGRAVE.**



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INTEGRATING VOICE WITH THE WMS

The voice directed work system integrates seamlessly with WCS's Warehouse Management System, with all voice-based transactions allowing for real-time maintenance of inventory levels and better synchronisation of replenishment activities. Pickers are allocated the best next picking assignment so as to drive efficient DC operations.



“ ACCURACY AND PRODUCTIVITY ARE CRITICAL IN MODERN DISTRIBUTION CENTRES AND THE USE OF VOICE TECHNOLOGY DELIVERS THIS BY UTILISING HANDS-FREE, EYES-FREE COMMUNICATIONS. VOICE OPERATION IS PARTICULARLY SUITABLE FOR PICKING FROZEN AND CHILLED FOODS, WHERE GLOVES HAMPER THE HANDLING OF PAPER OR THE USE OF RADIO DATA TERMINALS. MUSGRAVE IS LEADING THE WAY IN ITS USE OF VOICE AS IT LOOKS TO IMPLEMENT THIS ACROSS ITS LOADING FUNCTION, AND ULTIMATELY WITHIN RECEIVING.

- JOSHILA MAKAN, CEO, WCS.

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ACHIEVING MAXIMUM RETURN ON INVESTMENT



Since starting its voice implementation, Musgrave has recouped its initial investment and continues to see a return of 660k euros per year. It continues to achieve very high levels of accuracy and productivity gains remain near 9%.

“ VOICE HAS BEEN AN INTEGRAL PART OF OUR WAREHOUSE OPERATION NOW FOR A NUMBER OF YEARS AND IT CONTINUES TO ALLOW US TO ACHIEVE HIGH ACCURACY AND PRODUCTIVITY RESULTS. TAKING VOICE INTO OTHER AREAS OF OUR OPERATION IS COMPELLING, WE ARE TRIALING ACROSS LOADING AND WILL LOOK TO IMPLEMENT IN THE FUTURE WITHIN RECEIVING, REPLENISHMENT AND PI. THE ACCURACY LEVELS MAKE IT A VERY COMPELLING PROPOSITION FOR MANY AREAS OF WAREHOUSE FUNCTIONS. THE ROI FIGURES SPEAK FOR THEMSELVES, FAR EXCEEDING ANY RESULTS WE COULD HAVE ACHIEVED FROM OTHER COMPETITIVE TECHNOLOGIES.

- BRENDAN FITZGERALD, INDUSTRIAL ENGINEER, MUSGRAVE.



CSnx is a best-in-class supply chain management platform providing the capability to manage your supply chain from procurement of inventory through to management of the warehouse as it fulfils customer demand whilst providing the capability to manage your workforce at minimised costs.

WCS has developed a 'trusted advisor' relationship with a number of our core customers, which enables us to gain valuable knowledge and insight into their supply chain landscape. This allows us to add substantial value to our customers' businesses, not just from the perspective of their warehouse operations, but also from an overall supply chain network perspective. WCS is actively involved in helping its customers define and design their strategic supply chain network. We also introduce to them 'WMS best practices', including supporting technologies and systems.

Our relationship with Musgrave Retail Partners Ireland is a perfect example of this.



- Uniquely modular upgrades to your supply chain systems.
- Easy-to-use, flexible, and scalable out-of-the-box capability.
- Platform independent, built to maximise customer satisfaction and profit margins.
- Everything you need to automate, diagnose, and seamlessly manage today's complex omni-channel operations.



Purchasing



Warehouse Management



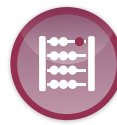
Voice



Labour Management



Pod & Asset Management



Billing



Yard Management & Reservations



Supply Chain Intelligence



e-Learning

Contact us for more information on how you can benefit from CSnx Voice.

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