



Over 25% gain in Warehouse Efficiency Achieved for Ireland's Leading Furniture Wholesaler Complex High-Volume Warehouse Operation

Established in 1977, Annaghmore is Ireland's leading furniture importer and wholesaler. An Irish owned family business, the company distributes its products throughout the UK and Ireland. Based near Portadown, Co Armagh, Ireland, Annaghmore strives to consistently deliver market leading products that are innovative, creative and, above all, competitively priced.

Products are sourced from leading furniture manufacturers and are prepared for distribution at Annaghmore's state-of-the-art 200,000 sq. ft. purpose-built warehouses. The extensive product portfolio includes dining, living and occasional furniture, bedroom furniture and lighting. The company stocks over 2,000 product lines with a delivery target within 15 working days.

THE BUSINESS

- Ireland's leading furniture importer and wholesaler
- Manages 1,000+ regular customers and over 2,000 products
- Supplies quality dining, living, occasional bedroom furniture and lighting
- Assembles furniture onsite prior to despatch
- Manages the receipt, storage and delivery of over 500 containers annually

SITUATION & CHALLENGES

On engagement, Annaghmore used a mix of its own storage and local third-party (3PL) storage providers. Stock issues were particularly troublesome as many customer orders contain multiple items stored in different warehouse locations. This caused inefficient picking leading to customer delivery errors and delays which had to be addressed quickly.

To improve customer service levels Annaghmore had decided to build an innovative 200,000 sq. warehousing facility at its headquarters location to centralise operations at a single site.

The company had operated Microsoft Dynamics NAV for its ERP and SOP systems but this technology had already hit some warehousing limitations and a paper-based system was proving inefficient, costly and a barrier to growth.

Other complications included a lack of stock movement history data. The varying sizes of products being managed, spans table lamps, beds and suites of furniture, with the larger pieces needing specialised handling equipment and dedicated racking types.

annaghmore
furniture importers and wholesalers

CHALLENGES

- Inefficient picking due to multiple products per customer order causing delivery errors and delay
- Reliance on a paper-based system proving inefficient, costly and a barrier to growth
- Lack of stock movement history data for stock management optimisation
- Managing varying product sizes - with larger pieces requiring specialised handling equipment and dedicated racking types
- Stock arriving without barcode labelling causing handling, storage and incorrect item shipping errors
- Forklifts and truck drivers returning empty 50% of the time
- Related orders or transactions within Microsoft Nav not consolidated



Annaghmore receipts, stores and distributes over 2,000 globally sourced products and handles over 500 containers annually. The varied size of items, and range of suppliers, throws up some unique warehousing challenges.

DELIVERABLES AND RESULTS

Item Identification, Sizing and Barcode Labelling

Most items arrive at the warehouse without a scannable barcode label. Clear identification and labelling was required upon receipt to prevent subsequent handling, storage and shipping errors, such as shipping the incorrect colour etc.

Purchase orders, managed in MS Dynamics Nav, included the original order information to line level. Principal Logistics Technologies engaged with the MS Dynamics supplier to ensure that each new product record included a barcode, and that each would be categorised into a pre-determined industry size category (e.g.: Euro Pallet standard height, Euro Pallet double height, double Euro standard height, etc.).

Physically, when a product is receipted, this is now done against the purchase order, which is interfaced to ProWMS and now generates a barcoded label containing the pre-determined size and category. This label, once scanned, directs the putaway operator to the correct zone and location for the item.



Warehouse Zoning

Warehouse operatives are now zoned. Different user groups are associated with varying handling equipment and only work relating to their zone appears on their handheld device screens.



RESULTS SUMMARY

- Efficiencies over 25% achieved and order fulfilment rates improved
- Optimisation enables management of increased stock volumes in 40% less warehouse space
- Damages and transport costs reduced
- Order picking errors eliminated boosting customer satisfaction
- Real-time business information available leading to improved decision-making
- Improved delivery accuracy resulting in less returned stock

The zoning logic is first by warehouse, then by handling equipment and finally by experience. This means that instructions are firstly zoned by the physical warehouse the operator is in. After this the operator is only presented with work based on the equipment type that they could operate (e.g.: standard forklift vs. special side loaders for larger pieces), and finally by user experience which allows some operators to only work in lower locations and more experienced operators to operate at higher locations.

"Pre ProWMS we required over 200,000sq feet to operate. We now handle increased volumes but are operating at 120,000 sq. feet, which would have been impossible without ProWMS. If you factored the above into your efficiency gains we would have gained well in excess of 25%."



**Conor McKeown,
General Manager,
Annaghmore Agencies**

Two Phase Interleaving of Putaway, Replenishments and Picking for VNA locations

To maximise space, Annaghmore had opted for Very Narrow Aisle (VNA) racking systems for part of its warehouse. ProWMS putaway algorithms now direct the forklift drivers to optimised locations based on a set of system-directed putaway rules.

For stock in VNA locations the process requires a two-phase putaway. A standard forklift driver is notified to locate the stock at the end of the required VNA aisle. They then scan the product barcode, locate the stock at the end of the required VNA aisle and scan a barcode location label at the end of that aisle.

This scan triggers a work request to the VNA forklift driver that there is stock awaiting putaway. The VNA driver scans the product barcode and this directs them to the pre-determined VNA location. A similar two-phase picking regime follows the same logic but in reverse. Stock replenishments have also been built into the workflow.



"Many WMS systems assign the operator a single function, be it putaway or extraction, and as such miss the opportunity of dual cycling, often leaving a forklift and driver returning back empty 50% of the time which is not an optimised process."

**Adrian Jennings,
Professional Services
Manager, Principal
Logistics
Technologies**



Consolidation of Sales Order Transactions

Another significant benefit delivered by ProWMS deployment was consolidation of picks.

With over 1,000 regular customers, more than 2,000 product lines and its own fleet of vehicles delivering throughout the UK and Ireland in under 15 working days it is commonplace that customers place additional orders before picking or shipping commences.

Previously, this had caused problems as different orders or transactions within Microsoft Nav could not be consolidated. This required considerable manual administration to consolidate orders in pick sequence. An improvement was business-critical as items missed would result in additional delivery costs along with poor customer satisfaction levels.

As sales order transactions are added within Microsoft Nav, ProWMS functionality consolidates multiple sales orders automatically reducing administration effort, eliminating errors, lowering transport charges and increasing customer satisfaction by improving order fulfilment rates.

"Before ProWMS, even with the larger warehouse space, when we reached 70% capacity we hit inefficiencies. Now operating ProWMS even with 40% less space, we only see these same inefficiencies when we are operating above 95% capacity".

Conor McKeown





"All boxes look similar in a furniture warehouse so identification by sight alone is inefficient. With one of the largest product portfolios in the market we urgently needed a system that allowed for, and managed, more stock in less space. It needed to integrate with our Microsoft NAV ERP sales order processing and stock management systems enabling us to deliver on our longstanding excellent customer service levels and to drive ROI and future growth."

Conor McKeown



"As the warehouse had not yet been built, we experienced the luxury of helping to plan operations for a new, empty warehouse. This meant that we could configure ProWMS functionality to fully optimise available space and assist Annaghmore with the racking configuration to accommodate varying sizes, heights and weights of stock, matching these for efficient putaway, replenishment and picking rules."

Adrian Jennings

ABOUT PRINCIPAL LOGISTICS TECHNOLOGIES

For over 30 years, Principal Logistics Technologies has been a leader in the design and delivery of innovative warehouse management software (WMS) and enterprise resource planning (ERP) software. Our technology and services optimise operational performance, reduce OpEx, and increase revenue for 3PL, distribution, wholesale, manufacturing, and retail warehouse businesses.

The company supports enterprise-level and multinational businesses with complex single and multisite operations spanning 3PL, chemicals & hazardous goods, hard & soft commodities, chill picking, cold storage, cross docking, eCommerce, FMCG, pharmaceuticals & healthcare and more. We operate from offices in Dublin in Ireland and Manchester and Birmingham in the UK.