



## Ireland's Leading 3PL Distribution Brand Managers Employ In-DEX WMS Warehouse Management System

Stafford Lynch is one of Ireland's leading providers of distribution services for third party manufacturers. Established in 1974, the company's successful portfolio of market leading brands reflects 44 years of brand building experience. Stafford Lynch serves the whole island of Ireland for its principals and their experience spans foodstuffs, pharmaceutical products and ambient temperature groceries.

The company's competitive strength in fast moving, fast changing markets is based on their comprehensive and proven range of services. These include national account management, marketing, sales and merchandising, supply chain management, finance and smart ICT systems. They currently operate across the food, drinks, homeware and consumer healthcare sectors. Brands managed includes Schwartz, S.Pellegrino, Sudocrem, Energizer, Wilkinson Sword, Baxters, Dr.Oetker Home Baking, Kettle Chips, PZ Cussons, Perrier and Walkers Shortbread.

### THE BUSINESS

- A *source-to-shelf* business operating across food, drinks, homeware and consumer healthcare
- Dublin-based 86,000 sq. ft distribution centre serving over 2,500 accounts across Ireland
- Capacity for over 10,000 pallets in single and double racking up to 15m
- 600+ orders and 83,000 cases weekly. Peak traffic reaching 110,000+ cases during busy periods

The Stafford Lynch distribution centre, is an 86,000 sq. ft purpose-built facility located in Blanchardstown, Dublin, with convenient airport and motorway network access. It serves the customer base of over 2,500 accounts across Ireland with capacity for over 10,000 pallets in single and double racking up to 15 metres high. Goods movements were running at about 600 orders and 83,000 cases per week, with peak traffic reaching over 110,000 cases in the pre-Christmas period.





## THE SITUATION

- No dedicated Warehouse Management System & an existing ERP system requiring integration
- A requirement to keep track of hundreds of thousands of items passing along the supply chain
- A critical need to ensure full product compliance, like food & healthcare
- The complexities of managing 2,500 + customer & 35 principals accounts while ensuring complete Transparency & Traceability

*"What the business needed was a fully joined up system. So any chosen WMS Solution, had to integrate successfully with Microsoft NAV, and the software for the handheld scanners in use in the warehouse, and by the delivery drivers."*

**Aidan Rice. Operations Director, Stafford Lynch**

Stafford Lynch's services to its principals and their joint customers are managed by five operating divisions, each with a unique structure and operation satisfying specific market sectors. The Retail Division, for example, serves the multiples' retail outlets and symbol groups, garage forecourts and independent wholesalers and cash and carry. They handle ambient dry grocery, including confectionery and condiments, beverages and snack foods, ethnic foods and a range of healthcare, pharmaceutical and baby care products. The company is fully ISO 9001:2000 accredited.

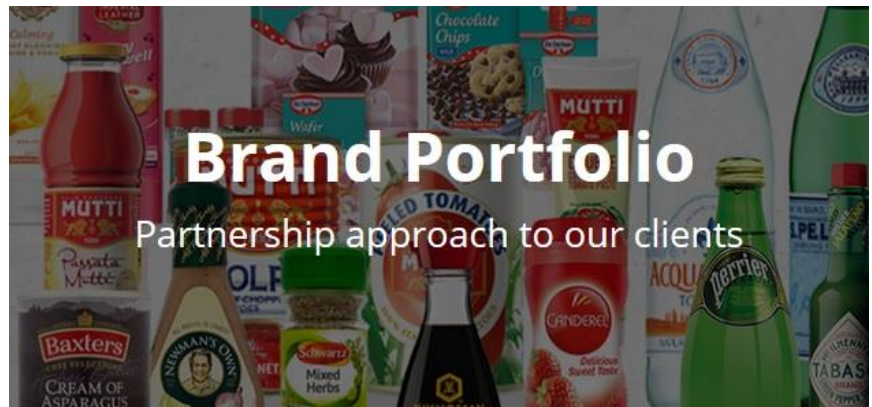
## THE SYSTEMS CHALLENGE

The company's business systems' mission critical task is to track and account for the hundreds of thousands of items passing through the supply chain and received into, stored in and despatched from, its central distribution centre. In addition to logistics and warehousing, the business must manage over 2,500 customer and 35 major principal accounts, and ensure compliance with all relevant food and healthcare product regulations. The Irish Medicines Board has a strict regulatory regime for all healthcare products, including over the counter items. Stafford Lynch is committed to the international *Good Distribution Practice Quality* warranty system. The company must also satisfy all of its principals as to the integrity of the supply chain. There must be complete transparency and traceability to support their regulatory compliance, where mandatory or agreed best practice is required.

The ERP system is Microsoft NAV. Prior to this the company used MS Dynamics GP and was also an early adopter of Great Plains in the Irish market. Microsoft NAV controls the sales order processing and other aspects of order fulfilment and related financial administration as elements of the overall ERP systems, with specialist solutions in the warehouse and for the handheld wireless devices. The Warehouse Management System implemented is In-DEX WMS from Principal Logistics Technologies.

## THE SOLUTION

There were several factors behind the decision to invest in a specialised Warehouse Management System. Aidan Rice commented on the choice: *"We had a growing business with no dedicated WMS, which meant that sales orders coming from Microsoft NAV were printed out and then manually assembled for despatch. That was inefficient and made it difficult to comply effectively with the mandated traceability and regulatory compliance for the many food and healthcare products that are key elements of our business. What the business needed was a fully joined up system"*.



*"We aim to manage our businesses from source to shelf, applying the specialist expertise developed over more than three decades to every part of the process. That includes continual development of our support operations, including information technology and communication systems across procurement, logistics and warehousing, particularly detailed inventory management and the general business functions of sales, marketing and finance."*

**Aidan Rice,  
Operations Director.  
Stafford Lynch**

In-DEX WMS, as the chosen WMS solution, had to integrate successfully with Microsoft NAV and the software for the handheld scanners in use in the warehouse and by the delivery drivers. Having worked with a solution from Principal Logistics Technologies in the past, Stafford Lynch was confident of the general performance of In-DEX as an intelligent WMS. It was, however, important to ensure that it could fully cope with the more sophisticated requirements of the extended product range. Aidan commented further: "We had a contract with a new principal coming online about that time which would require a high level of product traceability and that was very much on our minds in the timing and the choice."

Other considerations for the WMS solution included tight control of stock rotation. Apart from the traditional first-in, first-out element, about 75% of the products have *Best Before* and *Sell By* dates needing strict observance. Most have relatively long shelf lives, but some of them, like crisps, have shorter periods, which potentially makes the control of aged stock more difficult. In addition, Aidan Rice pointed out that product returns are a major feature of the business. "Accounting for them, including decisions such as uplifting back into warehouse stock or disposal, is a key element both of inventory management and traceability and of customer credits in the financial system."

The Stafford Lynch team, working with Principal Logistics Technologies, gave themselves just two months to specify the system and have it up and running. Initially, all goods inwards were taken into the WMS by labelling the pallets with unique bar code identifiers. After a few weeks, most of the warehouse stock was already labelled and a one-off manual exercise was undertaken to complete the labelling of all pallets in store. At that point the replenishment functionality was turned on and the warehouse staff was trained in the system using wireless handheld terminals.





*"Before installing the WMS system we reckoned our service levels were operating at a high-level of 88-90% accuracy." Aidan Rice said. "But monitoring of our KPIs reported 99.5% accuracy. That is, in fact, now the performance level on a regular basis. The business can see its stock levels accurately all the time and in real time, which in turn facilitates the efficiency of the procurement team. Similarly, the accurate stock movement records underpin the company's Demand Planning model."*

**Aidan Rice,  
Operations Director.  
Stafford Lynch**



The training process included the pickers becoming accustomed to following the picklist rules in assembling orders. These include, for example, a feature which means that a more conveniently located pallet cannot be substituted for what is specified by the system, so ensures consistent rotation. Warehouse picking is done via motorised pallet trucks, taking from the central pick face bays containing various categories of product. A separate team replenishes the bays as required when the system monitors stock falling below certain trigger levels.

The In-DEX WMS system controls the stock levels and replenishment, the order assembly pick lists on the handheld terminals, and a range of information relative to each order like customer and specific store, sales rep, carrier, picker and date and time stamps. Each pick list incorporates best routing according to pre-set rules, optimising location order and also ensures that fragile items are loaded towards the end of the list.

Out in the field, the core reps and delivery staff also work with handheld devices, which have in-built GSM data communications to link back to the headquarter systems. Order taking is straightforward, feeding directly into the sales order processing system.

Aidan Rice commented: *"Where our smart systems come into their own is in dealing with the many exception types that occur in this business every day. Short orders happen at our goods inwards point while in our own deliveries they are now uncommon but do happen. Returns are a regular feature, including rejection at the delivery site because, for example, the customer decides something is too close to its Best Before date. Other events might include transit or packaging damage. The important element is the automated and accurate handling of these exceptions so that returned goods can be checked and appropriately accounted for, down to case level and below."*

Such events are recorded with *Proof of Delivery* on the handheld devices and transmitted back to the In-DEX WMS system. These often involve third-party delivery contractors which generally have a five-day window to return the goods. This is monitored by In-DEX WMS and notices or alerts are raised when the procedures are not adhered to, including reminders to the hauliers of what they should be returning. A dedicated returns function monitors all such activity, including inspection and re-labelling, or re-categorising, of goods. In this way the company can give complete visibility of all returns to customers and principals.



*"The business objectives have been consistently attained, notably in efficiency and accuracy of all of our administration. We have a robust ICT platform for growth or diversification. Equally if not more important is that we have been enabled to raise the quality of our customer service to, we believe, a world class level."*

**Aidan Rice,  
Operations Director.  
Stafford Lynch**



A somewhat similar system function monitors product shelf-life in the warehouse. All stock at 30 days remaining shelf-life is removed from available status and quarantined. Some products may then be appropriate for special customer deals, others will be marked for disposal. The key point about returns, and other exceptions, is that all order fulfilment is fully tracked and never allowed to lapse due to the kinds of one-off occurrences that are inevitable in distribution.

Stafford Lynch has some unique internal structures, for example the set of 23 *anchor merchants* which are effectively internal units, like van sales, for administrative purposes. These have small stores of their own which draw down each week from the central warehouse as '*replenishment orders*.' When an order is delivered or released to retail, the barcode scan automatically decrements the stock position in the store and the warehouse. This aspect of the system has been tailored particularly to the Schwartz distribution and merchandising operation.

Stafford Lynch now has a proven set of systems for all aspects of its business operations. Microsoft NAV is the core ERP platform with In-DEX WMS from Principal Logistics Technologies, which is effectively the *glue* between a fully integrated central warehouse and inventory management system. The warehouse handheld devices and the GSM-enabled units used by staff in the field use barcode scanning and messaging software which has been set up to interface directly with In-DEX WMS.

Stafford Lynch now has an integrated, end-to-end set of solutions for its ERP, warehouse managements and fulfilment functions.

## **IN CONCLUSION**

Joe O'Shea from Principal Logistics Technologies commented "*Stafford Lynch now has a proven set of robust and efficient systems for all aspects of its business operations. Microsoft NAV is the core ERP platform with In-DEX WMS Warehouse Management System effectively acting as the glue between a fully integrated central warehouse and inventory management system.*"



## About Principal Logistics Technologies

Principal Logistics Technologies, part of Principal Systems Ltd., is the industry leader in innovative Warehouse Management & Supply Chain operation optimisation solutions. We bring over 25 years experience, with considerable technical know how gained from applying our globally patented In-DEX WMS Warehouse Management System to hundreds of successful upgrade and optimisation installations.

Our focus is on reducing OpEx enabling increased revenue for our clients. Operations range from single-site family run businesses with standalone Warehouse Management Systems to multinationals with complex multisite, end-to-end, supply chain operations. Our business sector knowledge spans 3PL, Bulk Commodities, Cold Storage, Chemicals, Chill Picking and Cross Docking, Distribution and Manufacturing operations, and more.