

# Material Issues

DELIVERING SUCCESSFUL SUPPLY CHAIN SOLUTIONS

The LOGISTICS Business



## iForce Increases Power in eFulfilment with The Logistics Business

**In 2002 outsourced efulfilment specialist iForce was facing a good problem to have – increased business from key customer John Lewis Direct. Following the Christmas peak in 2002, the twin targets for the following year were increased throughput to cope with the volume of orders, and higher levels of customer service.**



“We recognised that the warehouse configuration was not going to be up to the demands of the next peak,” said Harvey Swain, site manager of iForce, commenting on the distribution centre in Birmingham, which operates the fulfilment for John Lewis Direct. “We also wanted developments to deliver higher levels of service and efficiency.”

Also recognising that outside expertise would add to in-house skills in the major development required, iForce called in supply chain consultants The Logistics Business. “They brought some fresh thinking into how we could service the customer more effectively. The company provided a lot of analysis of the operation and this influenced the final solutions. They then saw the project through, effectively turning that theory into reality.”

One of the most visual changes has been on the physical layout of the site. Picking activities have been changed from multi level picks in pallet

racking using vary narrow aisle warehouse trucks, which were going to present something of a bottleneck in the forthcoming peak.

The revised solution changed this to pick from shelving and ground floor racking, increasing the maximum picking throughput dramatically. Over 50% of the thousands of product lines are now picked from the new shelving. This despite the wide variety of goods the operation has to handle, from key rings to furniture and high value items.

Processes supporting the picking operation were also changed on recommendation from The Logistics Business, with a move to a replenishment regime including directed put away in pick locations from goods in. The remaining stock is then placed in bulk reserve, rather than the previous system of storing all goods and picking only from bulk.

“The key change was to recognise that picking is for individual customers, so replenishment has been reorganised to be closer to a retail store, rather than a traditional warehouse,” observed Simon Tomlinson of The Logistics Business.

“This has been a significant change,” commented Swain. “With the pressure to reduce inventory and

have more rapid stock turn, up to fifty percent of goods go straight to the pick face, speeding up replenishment by hours and resulting in better product availability for customer orders.”

Development has also touched iForce’s in-house warehouse control systems. Tomlinson commented; “We carried out a lot of pick face profiling and developed rules which could be translated into the IT system. We spent a lot of time with iForce’s IT staff as the system was developed.”

Picking takes place into order totes and the system now includes volumetric calculation so that the correct size of tote is used from the start of the order picking process. “We also now batch customer orders and can set up picking waves, speeding up the process of despatching the thousands of orders per night we have at peak times,” added Swain.

Order picking is done using specially designed picking trolleys, allowing staff to pick 12 orders in one tour of the picking area. Packing has also changed, with the introduction of packing benches supplied by conveyor. The changes combined with the high level of functionality and responsiveness of iForce™’s SMaRT sytem have resulted in what Swain claims is “phenomenal productivity.”

The total transformation took just three months. The Logistics Business followed up on designs and recommendations with project support including equipment tender documents, supplier meetings and tender evaluations. Throughout the project, which included moving 90% of the warehouse stock, the operation continued to serve John Lewis Direct.

A vital approach for iForce was staff involvement from the start in the warehouse improvement



**“The result was that the new operation ‘sailed through’ an increased Christmas peak in 2003, and iForce were able to move the date for last orders before Christmas later.”**”

programme. Staff input into recommendations was supplemented with a thorough training programme. “This sort of thing very often doesn’t happen in a busy working warehouse, but we made the staff time available. It’s also about team building,” claimed Swain.

With the future growth in mind, The Logistics Business and iForce designed the warehouse to cater for many more peaks, with a marked increase in throughput performance. The company used the iFlow modelling tool, which maps projected flows of product into, out of and around a distribution centre. Different layouts were assessed and labour modelling used to prove congestion would no longer be a problem. The detail of The Logistics Business’ approach looked into changes in product groups as well as total demand. This allowed for comprehensive sensitivity analysis to prove the operation would cope with considerable future growth.



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# Little One Has the Grown Up Treatment

"You don't have to be big to get the best expertise," according to Kathryn Burgess, supply chain manager of children's clothing manufacturer David Luke, maker of school, scout and guide uniforms. "Our industry is fairly small and we deal mainly with independent retailers. Yet we are coming under price pressure and we knew we had to improve our efficiency."

One of the main areas identified for progress was the warehouse and despatch operation. "We had some ideas already, but did not know how to go about making the improvements. We contacted The Logistics Business and were initially interested in their health check service, but it was quickly realised that we needed a little more than that."

"As a company we have not focused on logistics much. We wanted to tap into the best expertise. Graham Mawdsley of The Logistics Business was able to provide that external perspective, even on areas we had already identified."

"We were always good at identifying things that could be done but he helped in the project planning and carrying them out. He even gave us a project template to make sure we were doing the right things."

Areas for improvement were identified and potential improvements specified, with a few days support spread over a number of weeks. One of the areas Graham Mawdsley picked up on was stock control and location. As a result David Luke have now ordered a stock location module for their business software, Aria. "We were increasing in size and knew we were losing stock, and losing time looking for it. We have had to have a specific module written for our integrated system. Luckily, Graham was there to make sure all the pertinent questions were asked and we got all the right answers," adds Burgess.

Improvements have also been made to the picking and packing operations, plus staff reporting

and lines of responsibility, eliminating earlier confusion. Burgess; "the warehouse has traditionally been the poor relation in our industry. Giving it priority helped to improve morale."

Measuring and reporting in general has been considerably improved, for example David Luke can now assess supplier delivery performance and identify companies which need to improve, benefiting David Luke's own smooth operations.

"The Logistics Business also developed forecasting for the warehouse. We found that we were going to run out of space this May, but because we had anticipated the peaks we could plan for it and find external storage for surplus stock before it became a problem."

Improved measurement is helping the company in other ways. "We can now see where we are and the areas to be improved. Our last annual stock take was also so much smoother," adds Burgess, who has to cater for many different school uniforms leading to, for example, around 30,000 school blazers in stock. "We did not lose half as much in missing stock and we finished sooner."

Although some of the improvements are still to be completed, the business is already seeing significant benefits. "We have increased our performance. For example, we have reduced errors. That's not the only customer service benefit; we are getting orders out more quickly and have managed to cut our maximum order backlog by over two thirds," claims Burgess.

"The service was absolutely affordable, even for a relatively small company such as ours," states Kathryn Burgess. "For just five days support, it really makes a difference. You don't have to be ICI to get top level service."



## New Construct

The Chartered Institute of Logistics and Transport's latest Forum, focusing on the issues and developments of supply chain management for the construction industry, has its first Chairman. Industry expert and director of consultancy The Logistics Business, Rick Ballard.

The growing importance of supply chain in the construction industry is at last being widely recognised. There is an opportunity to involve the increasing number of supply chain professionals and innovations that are flowing into the construction industry.

The new Construction Supply Chain Forum will



# The Engineer Gets Legal

By Clive Weston

Managing the implementation of a major warehouse automation project can be a daunting task. Few companies, however large, have the in house experience in a process which is going to have such a major impact on their business.

The role of the Engineer on the project is central to success and has a serious contractual function as well. Which is why organisations often bring in outside expertise.

Argos, for example, have just completed a major automated distribution centre. Over a three year period, I have been The Engineer, from empty field to fully functioning operation.

Acting as Argos' warehouse engineering and design specialist, The Logistics Business

has worked closely with the contractors to ensure that Argos made the most of its £multi million investment.


The Engineer role has contractual responsibilities and obligations – he signs off and accepts installations on behalf of the client, approving any modifications or changes and all associated payments.

The Engineer also has a contractual role in assessing progress of the project and approving supplier payments and completion of elements of the system. Every technical submission in the sophisticated project at Argos was approved.

Responsibilities ranged from drawings to site inspections and system testing. Essentially we have to prove the design in

practice and finish with a fully working installation. This included testing, from the components right up to running for four whole days at design throughput.

We were also involved in the IT changes required, and acted as the conduit for the vital integration of the warehouse. The Engineer also worked with the building consultants to ensure that building and internal installation all worked in harmony.

The success of the project has relied on an effective working partnership between Argos, The Logistics Business and the contractors, which has also brought in key component providers. 



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## Construction Industry Supply Chain Forum



Steering committee of the Construction Supply Chain Forum meets

act as a centre of excellence for supply chain thinking and a focus for sharing developments, according to Rick. Events are planned for the year. Interested members should contact Rick Ballard on 0121 333 6303 or email [rick.ballard@logistics.co.uk](mailto:rick.ballard@logistics.co.uk).

With 17 years experience in supply chain operations, Rick Ballard has been a leading thinker in logistics and a conference speaker over the last decade. Since co-founding The Logistics Business, he has been involved in major Government and industrial projects focusing on construction.

# Launch Pad

Simon Tomlinson discusses the vital order launch process in the warehouse



There are a number of warehouse operations we have come across that don't quite deliver what was expected from the design. One of the main reasons can often be traced to the order launch process – the way customer orders are released to the picking operation.


This is particularly vital in higher throughput, multiple order picking environments such as grocery retail, home shopping – any situation where the order to pick items is decided when the bulk of the orders have been received.

Operations need to optimise for a number of different, often competing, factors; orders need

to be picked in time for loading, yet balance workload across zones, avoid congestion and allow time for pick face replenishment. With totes, the operation may not even know just how many are needed before picking commences.

There can be difficulties in finishing picking on time, especially in automated operations. This is usually because operations are designed without taking into account the reality that there will often be a slow start, a peak near the middle and a long 'tail' of stragglers at the end. So staff can be hanging around at the beginning and end of shifts, resulting in inefficiency.

The answer? A system must be designed to continually reassess priorities and re-plan activities throughout the day. Staff can be deployed in split shifts, or moved through the picking, packing and despatch operations to follow the peak. The WMS needs to be sophisticated enough to manage workload balancing. Pick face profiling should be carried out as a regular activity. And experience has shown that even on a peak day, the peak hour will be around 30% more than the average hour.

The golden rule is; you can't just light the blue touch paper and stand well back. 



## FUTURE SCOPE

EDITORIAL BY LES BEAUMONT

**Transport is cheap. Too cheap, some would say, but that is about to change. This will have a fundamental effect on modern logistics – supply chains are currently constructed in the UK, in Europe, around the world on the basis of permanently low transport costs but the goal posts are moving.**


There are several reasons why, within the UK and Europe at least, costs will rise. One is legislation, such as the increased costs of complying with the Working Time Directive and

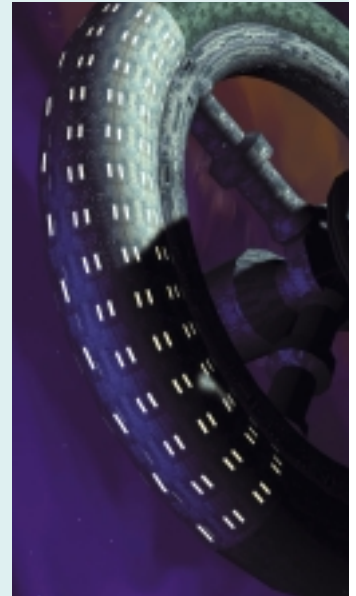
ever tighter vehicle delivery restrictions.

Another is congestion lowering average speeds. Add to that rising fuel costs, tolls, vehicle and fuel duty.

Nor is rail able to cope cost effectively as road transport becomes an increasingly expensive option.

Yet many organisations have based their infrastructure on long distance trips, with focus factories and single source supply for many countries.

Transport cost sensitivity needs to be embedded in future plans. And those plans should be based on more expensive transport links. As a result, these links will be shorter, sourcing more local and distribution will move closer to the point of demand, halting the centralising trend of the last two decades. 



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