



# C3 Solutions

## Case Study



## OPTIMIZING THE RETURN ON RETURNS

In 2007, after re-evaluating the performance of the supply chain, a U.K. based European electronics retail giant prepared to implement a new operating model. This was a big shift but it was carefully designed to enable them to work better with suppliers and improve customer service. The new operating model created a centralized collection and delivery point for suppliers.

### **A NEW CENTRALIZED RETURNS HUB CREATES ITS OWN YARD MANAGEMENT CHALLENGES**

With 1,300 stores and online operations in 28 countries, 40,000 employees, and more than 100 million customers every year, when this customer has a logistics challenge it is, by definition, a major one. When it was time to implement the new operating model at one of their yards and to centralize what used to be multiple operations at a single site, C3 Solutions was called in to help.

Centralization at the new hub introduced the important issue of control and resource management in the yard. With higher volumes, the already problematic situation would only get worse. Logistics planners were concerned with the number of trailers, trailer types, load types, and how long trailers would be in the yard. Good record keeping and accurate yard inventory were also critical to smooth site flow. Without a Yard Management System in place, a completed yard check was out of date by the time the updated inventory sheet arrived back at the office.

### **CHOOSING A YARD MANAGEMENT SOLUTION**

This retail giant spent nearly six months identifying and vetting partners and solutions to keep its campus running smoothly. The evaluation process led to a clear choice: C3 Solutions and its yard management solution were the right fit.

The logistics planners liked that C3 is a yard-focused company specializing in exactly the type of product this company was looking for. At the first demo, the planners were impressed with the flexibility, power and usability of the system.

Our customer appreciated that the software could be used standalone or integrated with its WMS. With C3's experience in massive scale yards, the decision makers were reassured that the C3 team was up to the challenge.



## GOING LIVE

C3's yard management system went live in November 2007, during the peak sales period. The transition was smooth and well received on-site by the staff who actually had to use the software. The implementation was paying off in all the ways our customer had hoped it would.

### THE UNEXPECTED RETURNS

What our customer saw on day one was eye-opening: for the first time the scale and volume of the returns operation was revealed. Using C3's yard management software, they were finally able to see the sheer number of returns trailers in the yard – each trailer requiring unloading to then be cycled into outbound operations. The impact the returns operation had on the entire site flow had suddenly become glaringly obvious.

The staff looked at the stats provided by the system and saw a need to overhaul how the returns operation was resourced and organized. As greater efficiencies were introduced into the returns receiving operation the benefits were realized throughout the yard, particularly a significant increase in the on-time supply of empty trailers to the Regional Distribution Centre.

C3's yard management software not only helped our customer identify the initial choke-point that returns were creating in the yard, it helped the logistics team identify additional points within the returns operation that needed to be ironed out. Door assignment for returns trailers was one of those critical points. To solve this, C3 was used to facilitate the creation of a dedicated Returns Door Group, providing semi-automated delivery of returns trailers to the appropriate doors, and a flow of empties to the outbound operation. More efficiencies have been achieved by the savings on shunt moves, where trailers are moved from door to door, without being dropped in the yard, as was previously done.

### THE HIDDEN PROBLEM:

#### RETURNS WERE CHOKING THE YARD AND SLOWING DOWN THE SYSTEM

Returns are always a major challenge for yard and DC operations in the consumer electronics and white goods industry. The products are often big and bulky and need to be returned to their manufacturers. Managing the return system at our customer's hub was no exception, trailers full of returns created a serious chokepoint in the yard, but with limited visibility in the yard this caused major headaches without a clear view to the source.



## WHITE GOODS

Typically refers to large household appliances such as fridges, washers, stoves etc.

## BROWN GOODS

Refers to smaller electronic devices such as DVD players, camcorders and game consoles

To put the problem into perspective, in 2006-2007, some 2.5 million small brown goods and 160,000 white goods and large screen TVs were returned to suppliers, all of which generated credits of approximately £155m.

In the past, our customer's handling of returns to suppliers was fragmented across the business. Small brown goods were handled through a specialist unit while large white goods were processed manually through a network of 17 stockholding Local Distribution Centres. Suppliers collected returns from and delivered into a variety of locations using different procedures and systems, sometimes processing the same returns at multiple locations.

It was only on centralizing this process and gaining full visibility into the magnitude of the returns operation that this company was able to understand how integral it was to the rest of the site flow.

### SMOOTHING OUT THE PEAK PERIOD

In the peak period that followed the C3 yard management system go-live, the transport operation was able to cancel orders for three additional shunt trucks, seven tractors, and 34 rental trailers because of the optimized yard flow and better adherence to schedules. All of this was made possible as a result of the increased visibility on the yard and the resources in it.

"From a position where we had 80+ returns trailers in the yard with no real idea exactly where they were, we quickly progressed to an average of 20 accurately-located trailers awaiting unloading, with the day's trailers constantly being delivered to the returns bays," explains the General Manager National Returns.

"This has now dropped even further. By the end of the returns peak we were at 10."

"The visibility and powerful performance measures provided by C3 from the outset allowed both operations and third-party logistics provider to have much more meaningful dialogue and exercise more control than ever before," says the Transport Contract Manager. "Coupled with an improved customer delivery performance, this gave us the confidence required to make the decision to decrease the planned fleet."

Progress was dramatic. During the returns peak, the total trailer fleet was 477 trailers and the tractor fleet was 161 units. Today, the numbers are 307 trailers and 101 tractors. "It's normal to see a reduction after the peak period, but we think at least 25% of the trailer reduction can be attributed to the confidence achieved by higher-quality information provided by C3," explains our customer's Transport Contract Manager.



## **POWERFUL DATA DRIVES NEW EFFICIENCY ANALYTICS**

In the longer term, the staff has a much clearer picture of how docks and resources are used. This visibility gives management the ability to drill-down into specific aspects within the operation in order to streamline with full confidence of understanding the real impacts of any moves. The next step is to implement online supplier bookings, which will drive even more optimization.

## **WORKING WITH THE C3 TEAM**

The software is only half the battle in any enterprise-scale solution implementation. The rest of the equation is the expertise, experience and ability to deliver of the supplier team in charge of the implementation. "We all found the C3 team extremely knowledgeable, not only about their product, but about the whole business area in which we work," says our customer's General Manager National Returns. "We were impressed with their work, both its quality and quantity, their enthusiasm for the project and the level of commitment and support over the implementation period." And the relationship continues to grow.

## **CONCLUSION - WHAT IS THE RETURN FOR FIGURING OUT THE RETURNS PUZZLE?**

For our customer the answer to the question "what did we get out of this process?" is as simple as it is powerful. The enterprise gained the visibility and clarity they needed to get their centralized Campus yard flowing efficiently. That efficiency has translated into faster returns, lower yard costs and an overall boost to the velocity of their logistics system. That's what we call a return on investment.

### *About C3 Solutions*

C3 Solutions is an information technology company specialized in yard management (YMS) and dock scheduling (DSS) systems. Since its founding in 2000, C3 has gained the confidence of clients around the world and across many industries including retail, grocery, distribution, manufacturing and parcel post. Headquartered in Montreal (QC), Canada and privately owned, C3 is dedicated to developing, implementing and supporting the most complete yard management and appointment scheduling products on the market today.

For more information, visit [www.c3solutions.com](http://www.c3solutions.com)

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