ARTICLE

Ensuring Cost Effective E-commerce Operations

The Challenges Facing CEOs and CFOs and How to Ensure Efficient Warehouses and Logistics

For many businesses, **the warehouse is the new storefront**, driven by the migration from customers picking their items in-store to warehouse operators doing it for them through an E-commerce (“Ecom”) order. The huge increase in picking activity that warehouses have seen means these previously “grey” facilities that executives rarely visited now represent a major part of operating cost that drives significant capital investment, and are increasingly important to ensure that they’re run efficiently.

A decade ago, retailers’ success didn’t depend upon their warehouses being particularly efficient, given their cost was relatively small when only handling cartons or bulk picking to replenish stores. For a retailer to make a decent profit, success was largely driven by product, merchandising and store management.

With Ecom growth, however, the operational cost of picking individual items for customers or dealing with their returns is huge. Additionally, customer service is critical, meaning warehouse and transport efficiency are now vital to most retailers.

Warehousing has migrated from a grey, bulk handling operation to a labour-intensive, 20-plus-hours-a-day activity, facing frequent peaks in demand as well as labour shortages and inflation.

Complexity in warehouse and logistic operations has never been greater, nor has there been a stronger need to get them operating efficiently. This applies to most retailers but also to a growing number of consumer goods companies that see opportunity in establishing an Ecom channel, shipping direct to consumers or via resellers such as Amazon.

For many businesses, there are **four common challenges when it comes to achieving greater efficiency in Ecom operations**:

— ***Operational management competencies across warehouses and logistics are often limited*** even to support a legacy world of moving cartons, let alone the much more complicated world of picking extremely high volumes of individual Ecom items, or dealing with chaotic return inflows in efficient ways.

— ***Processes and automation to make Ecom workloads efficient are varied and not intuitive***. This, alongside varied operational competency in warehouses, frequently results in poor decision-making regarding which processes and automation to use. This results in implementations being delivered late, failure to deliver expected benefits or the warehouses not working properly in its first year of use.

- ***Executives sometimes lack the experience to judge what good looks like*** in terms of an efficient, fast-paced Ecom warehouse, or what the best route is for the nature of their products, customer base and developing market. This is understandable given Ecom is changing rapidly and less mature than brick-and-mortar store operations.
- ***Last-mile delivery, which is a significant cost element, usually has few "providers with scale"*** to choose from, providing limited ability to drive productivity through commercial negotiations.

From our deep experience in warehouse and logistics at FTI Consulting, we are no longer surprised by the situations we come across when assessing a business's operations.

Whilst an Ecom warehouse often looks busy at peak times due to the high workload it generates, it's important not to be fooled into thinking it must be operating efficiently.

Simple performance measures such as cost per pick and orderlines picked per hour, and service level measures such as OTIF (on time and in full), are good high-level indicators of performance, but they do not indicate whether a warehouse is being run effectively, what inefficiencies there are or how to drive improvement.

You only truly know if a warehouse is efficient when you look deeply into its operations. As an example:

- A department store business with 40 large stores and more than €1bn in revenue was struggling with limited warehouse space due to growth in Ecom. Executives were hesitant to invest in leasing additional warehouse locations given they already had three within 50km of each other.

  An independent assessment of operations showed that they had the same stock across multiple locations in all three warehouses, but with many of these stock keeping unit (SKU) locations less than 20% full. Consolidation of stock enabled the closure of one warehouse and freed up space for Ecom growth. They had been sitting on a cost reduction opportunity without realising it.

We've seen many examples of limited management competency in warehouses, including poorly thought-out processes and layouts, missing (and in some situations not even understood) basic best practices, poor KPIs, and lack of continuous improvement focus.

Common reasons for lack of management robustness are:

- Warehousing good practice is often "learned on the job", and there are few schools for best practice in high-volume Ecom warehousing efficiency.
- Warehouse managers often have either long tenure with limited external experience in modern best practices or a history of very short tenure with no window to make lasting change happen (partly connected to the third-party logistics [3PL] world, where contracts are often only two to three years).
- High staff turnover, with temporary workers used to meet seasonal spikes and with pay at the low end of the scale. This creates major challenges in how to rapidly and diligently monitor performance.

Our experience of poor warehouse performance is not constrained to businesses with old infrastructure or warehouse systems, or just to in-house operations. ***Companies with even the most modern, expensive warehouse management systems often have poor processes in place*** in terms of how their operations/systems are set up and used in the warehouse. Similarly, even with modern enterprise resource planning (ERP) systems, warehouse efficiency can also be impacted by poor collaboration between the warehouse and the business if there's no effective sales and operations planning (S&OP) process across the key functions of product planning/marketing, sales, procurement and logistics.

Companies that use 3PLs rather than operate their own facilities can find they're picking up the bill for poorly run operations and simply move from one operator to another, mistakenly thinking that retendering will deliver better operational efficiency.

For many growing Ecom businesses, there is an ***ongoing shift in terms of where capex is spent, from supporting store expansion and refreshes to enabling efficient Ecom warehouse operations***. However, getting this capex investment decision right can be challenging given the complexity of developing requirements and the need to assess varied potential automation solutions without the experience of having done so before.

The days of specifying a warehouse simply by its number of pallet locations or orders per day are long gone. It is now critical to understand specific characteristics such as the nature of an Ecom order profile across the SKU range, given that different automation solutions have strengths and weaknesses in areas such as these.

A case in point would be the relatively new "cube type" automated storage and retrieval systems that access products for picking via the top surface of a large cube of stacked plastic totes.

Whilst having various advantages over other storage/retrieval automation approaches, such as a compact footprint and ability to handle high orderline type orders, these cube automation systems also have performance limitations to be aware of, a key one being the fact that their efficiency and throughput significantly decline if the profile of picking is more evenly distributed across the range of SKUs that is held in the automated storage system. Effectively the robots spend more time digging for the right totes than getting them to the pick stations.

Even with the best contracting approaches, the responsibility for choosing the right automation approach and getting the specification correct is always with the customer, and when you've not done it before, it's easy to get it wrong.

The challenge of making automation investments "come good" is made no easier with the rapidly changing nature of Ecom, where requirements for the next five or 10 years are hard to define. Ensuring flexibility and optionality with capex is critical when payback is over many years.

Spending a lot of money on sophisticated warehouse management systems doesn't always lead to efficient operations, and the same can be said for investment in automation of storage and order picking processes. Some examples which highlight the need for deep experience when automating warehouses to ensure they deliver can be found below:

— A major homewares business that invested €40m in automation found that the operation fell over on its first "Black Friday" due to poor management control of the in-feed to its highly sophisticated sortation system. This was not a case of the automation failing to meet its specification, but of poor understanding by management of the limitations of the automation and how to control it.

— A large, global distributor found its major investment in a purpose-built automated warehouse had severely restricted output due to a lack of buffering between picking and outbound consolidation. Automation had been a bolt-on rather than an integral part of the design of the end-to-end process in the warehouse.

Operations and supply chain directors sometimes lack sufficient experience to know whether their Ecom warehouse and logistic operations are truly efficient, or the best way to automate their warehouses. In this situation, independent expert review can help highlight the hidden opportunities, but also drive transformation and ensure that the investment delivers.

For CEOs, CFOs and COOs struggling with their fulfilment operations, FTI Consulting is often asked to intervene where:

1. There is a need to improve warehouse service or operating cost, and the team has insufficient experience in understanding what good looks like, or lacks a track record of improving operations.
2. A transformation is not going to plan, with a need for rapid hands-on turnaround or quality assurance.
3. An investment or transition in warehousing has fallen short of what was expected, or requirements have changed, with review and redesign required.

How we can help

FTI Consulting's Business Transformation practice works extensively with leading retail and consumer products businesses to achieve major transformations in supply chain, warehousing and logistics operations.

Our team has deep experience in:

- Diagnosing and delivering performance improvement in warehouse operations
- Rationalizing footprints and managing transitions
- Developing, specifying and implementing warehouse construction and automation
- Tendering and negotiating contracts for 3PL services, warehouse construction and automation
- Migrating legacy systems and processes to modern, efficient operations
- S&OP process redesign

The views expressed in this article are those of the authors and not necessarily the views of FTI Consulting, its management, its subsidiaries, its affiliates or its other professionals.

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