Increasing Capacity in a Fulfillment Center

With the recent rapid growth in ecommerce, fulfillment centers are increasingly under pressure. When physically expanding a facility is not an option, how can fulfillment centers use the latest technology to increase capacity and maximize the square footage of their existing facilities?

There is mounting pressure on the infrastructure in warehouse and fulfillment centers. As a direct response to the global pandemic, the volume of outbound and inbound parcels is higher than ever, and limited capacity affects delivery times. Unable to physically expand, fulfillment centers are challenged on their throughput rate, improving stock rotation, temporary storage of goods, and boosting uptime. All of which has only been amplified by the global pandemic's effect on ecommerce orders.

Third-part logistic carriers (3PLs) are currently searching for innovative ways to increase their capacity and future-proof their operation. Every part of the facility contains the potential for increasing throughput, which is why every touch-point of the operation must be considered.

Optimizing your current fulfillment center setup

Automating every aspect of a fulfillment center might not be the way forward for everyone. The costs of automating can, in some cases, outweigh the cost of output, which is why accurate analysis can help facility managers identify focus areas to automate.

► If you automate all parts of the operations, you might risk higher service costs and a greater total cost of ownership. Advanced and sophisticated automation results in more skilled labor needing to service it. These are the types of factors you need to consider when identifying your needs and which parts of your fulfillment

center should remain manual and which parts should be automated, explains Derek Wright, Managing Director at Caljan UK.

When looking at optimizing the facility, taking on-peak and off-peak periods into consideration are important factors, as well as the balance between storage and flow in order fulfillment. Derek Wright continues:

► Fulfillment centers need to strike a balance in optimizing their facility, be this with high-density storage, high speed order picking or a more dynamic or efficient flow. Now more than ever they must consider the unloading of inbound goods and the loading of outbound goods.

FAST TRACK

- Fulfillment centers need to strike a balance between storage optimization and an efficient order fulfillment flow.

- Identifying optimizations in the fulfillment center require maintaining a holistic view of the entire operation.

- Typical pressure points include the inbound and outbound from the loading dock to and from storage, the picking, and sortation.

> " *By looking at how the materials are handled, you can automate and achieve greater optimizations that help increase the throughput of the facility.*
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> – Derek Wright, Managing Director in Caljan UK

Future-proofing for growth in ecommerce

Ecommerce fulfillment will only continue to grow, and facility managers will need to find future-proofed solutions that can flexibly adapt to changes in the market. A specific area where fulfillment centers are increasing throughput and reducing human error is in the labeling process.

► If you implement an automated labeling system, it will automatically cross-check order data with the parcel's unique bar-code. This means you can increase the throughput of the entire labeling process. We are seeing more facilities automate the labeling area and integrating with their ERP and WMS systems, which helps bolster the facility for the future, explains Neal Oeschle, product specialist within labeling and document handling at Caljan USA.

Identifying the pressure points whilst maintaining a holistic view of the entire operation is essential. Automating the labeling area may increase the throughput in this specific area, but other areas in the order fulfillment process may not be geared towards this increased activity.

► Typical pressure points that might interrupt the order fulfillment process include the inbound and outbound loose loaded cargo from the loading dock to the storage, the picking, and sortation. Essentially, by looking at how the materials are handled, you can automate and achieve greater optimizations that help increase the throughput of the facility, explains Derek Wright.

The future of fast delivery and easy returns in ecommerce relies on fulfillment facilities getting parcels even quicker out the door. Facilities must use technologically advanced solutions to automate and increase capacity and remain cost-effective. Whether it is automating the labeling process or the loading process, facilities that successfully achieve efficiencies through automation will meet future growth rates and changing consumer demands.