



# Warehouse Optimization Gaining a Competitive Edge

## Streamlining warehouse operations with Lean - Six Sigma

To stay competitive companies are looking for solutions that will positively impact the bottom line. Implementing new Lean – Six Sigma strategies for warehousing and distribution will not only improve your current process, but they can give you an edge over your competition.

Today's warehouse directly shapes the experience customers have with your company.

- Are products customers need in stock?
- Are the products protected from damage?
- Can they be easily located, packaged and shipped? Same day?
- Does the customer's product arrive undamaged, with an accurate invoice and documentation?
- Are customers getting what they ordered, when and where they need it?
- Do you have too many products in stock?
- Are the quantities and values accurate?

*The bottom line is that your warehouse is on the critical path to your customer, and the overall efficiency and effectiveness of your operation will greatly impact your company's overall profitability.*

### Streamlining Warehouse Operations with Lean – Six Sigma:

During the initial discovery phase Synergy improvement specialists use five Lean – Six Sigma tools:

- Spaghetti diagram
- Time studies
- Pareto analysis
- Kaizen
- Work station design

The less time a worker spends walking to put-away or looking for SKU's, the more time the worker spends picking. Using spaghetti diagrams and time studies to document and visualize the amount of time a worker spends travelling and searching instead of picking provides the first step to Synergy's warehouse discovery phase. This initial step frequently provides organizations with an eye opening assessment of picking productivity.

The Spaghetti diagrams and Time studies are then used to develop layouts to ensure every inch of space in the facility is utilized efficiently.

Pareto analysis is the next tool used to define the most effective and efficient warehouse slotting strategy. The basic objective is to improve storage and picking efficiency and reduce warehouse handling costs by optimizing product location and balancing workload.

With spaghetti diagrams, time study results and SKU velocity Pareto charts complete, the next phase of the warehouse improvement program moves into

the Operational Streamlining phase. While SKU replenishment levels are being reestablished, warehouse Operational Streamline is kicked off with the execution of Kaizen. Kaizen is acknowledged as a proven Lean technique that delivers rapid improvements, challenges the status quo, builds teamwork and delivers performance improvement beyond the expectations of everyone involved.

Concurrently, Synergy specialists work with the client's core team to assess existing business systems. Software Integration is a popular topic in warehouse operations. Often it is found that organizations spend large amounts of non-value added time managing processes in multiple systems. This is both time consuming and prone to errors.

Over time Synergy experts have found that integrating WMS and ERP system into warehouse operational strategy can save significant amounts of time and dramatically reduce errors.

Software integration can create efficiencies not just in the warehouse, but also across other departments that are responsible for reporting and financially tracking operations. Software integration can also provide improved inventory traceability and tracking.

Barcoding is another way to improve the efficiency and accuracy of your picking system. It has been proven that incorrectly picked parts add up to hundreds of thousands of dollars to an organization's lost profits. Determining the cost of an incorrectly picked SKU and then multiplying that by the number of incorrectly picked SKU per week or month is necessary to calculate the return on investment (ROI) of adding a barcode scanning program to your storage systems. Having the ability to scan inventory based on the UPC bar code is a quick and easy way to ensure that you are picking the correct item every time.

**Summary:** Keeping workers in their assigned areas doing value added work, streamlining picking routes, establishing an effective slotting strategy and deploying high-efficiency technologies will streamline warehouse operations and increase warehouse efficiencies.

The deployment of Lean – Six Sigma principles delivers rapid improvements, challenges the status quo, and delivers warehouse performance improvement beyond the expectations of everyone involved.

It is acknowledged that the blending of Lean and Six Sigma improvement techniques help companies realize higher levels of business performance. It is also recognized that employees working in Lean – Six Sigma based companies generally find work to be easier and more gratifying, resulting in higher employee morale and job satisfaction.

For companies serious about improving business performance and with the resolve to take the necessary action, Synergy Resources offers a unique combination of products and services: Strategic Business Services, Software Application Services, Continuous Improvement Services, Quality Services and Technical support to help companies achieve sustainable business performance improvement.

*Lean is about improving the value of activities so that workers are performing duties that directly relate to the result that the customer wants and the organization needs.*

Call or email Synergy today to learn more about how Business Performance Improvement can increase your competitive advantage [sbs@synergyresources.net](mailto:sbs@synergyresources.net)