

A look at GENCO's warehouse workforce optimization technology

Staying Competitive in Tomorrow's Marketplace

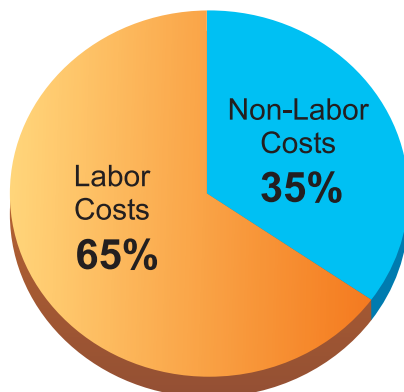
Results speak for themselves. Our industry likes to see numbers—hard numbers that provide solutions. According to industry research, labor is the single-largest key for unlocking the door to reduced costs and increased profitability for warehouse operations. Studies show that only best-in-class companies truly maximize their savings through labor management systems.

Improving workforce productivity

According to AMR Research, workforce planning and management is one of the major challenges for facility managers. Traditionally, 65-70 percent of the cost of operating a warehouse is labor, so there is significant potential for savings by using a task management system to monitor productivity. While labor management systems (LMS) have been around for a number of years, many companies are unaware of their value and how they can be integrated with warehouse management systems (WMS), time & attendance and payroll systems to optimize performance management.

Improving Workforce Productivity

Measuring performance



The labor issues driving the need for implementing LMS are many: 25 percent of today's working age population will leave the U.S. workforce by 2010—leaving a shortage of 10 million workers. As the population continues to age, the workforce will continue to shrink; creating competition for that smaller labor pool and increasing wages.

Introducing GENCO 3PR

GENCO has renamed its labor management system—supplied by our partner Manhattan

"If you can't measure it, you can't manage it."

Gary Siefert

Vice President, GENCO Strategic Technologies and Six Sigma Black Belt

Associates—3PR: People, Partners, Progress, and Recognition. "It's a system that has input from all parties involved in effective distribution center operations, including hourly teammates," says Gary Siefert, vice president of Strategic Technologies. "We are also developing an incentive program based on the 3PR system, where top performers will benefit by doing a good job."

Warehouse operations have a range of workers: exceptional, middle of the road as well as underperformers. Accurately measuring performance can be difficult and often misleading. For example, depending on the warehouse size—say a million square feet—a worker may be required to pick an average of 250 cases an hour. Traveling through a large area, perhaps 20 aisles, will make it difficult for the worker to achieve that rate because of travel time, whether on foot or riding on a pallet jack. However, if only five aisles are

involved, that same worker may be able to pick 250 cases in one quarter the time.

"If you can't measure it, you can't manage it," Siefert emphasizes. "Without a 3PR system you are just measuring based on historical averages. Workers whose numbers may look exceptionally high may not be working as hard based on the type of order or work they happen to be performing on a given day. The person who worked harder may be the one who had to go throughout the entire facility as opposed to five aisles."

Benefits of 3PR

By using GENCO's 3PR system, you will be able to:

- Measure the productivity of your workers
- Compare worker performance across functional areas
- Ensure that your labor performs to its potential
- Reward those workers who exceed performance standards
- Identify bottlenecks and obstacles in your operations
- Track productive time of entire day
- Monitor non-productive time of all workers
- Monitor performance levels in real time
- Experience results:
 - Increase productivity 5-10 percent
 - Decrease non-productive time 10-15 percent
 - Tighten breaks, lunches, shift start/end, miscellaneous time
 - Reduce overtime
 - Bring facility to 100 percent of standard and above
 - Force utilization of best practices.

Engineered Labor Standards (ELS)

take into consideration task travel time, equipment speed, motion required to perform the task, motion frequency as well as facility XYZ coordinates to calculate the expected amount of time to accomplish a specific task.

As a supplement for LMS, ELS:

- Increases productivity an additional 7-12 percent
- Utilizes best methods analysis
- Enforces utilization of standard operating procedures
- Emphasizes labor utilization
- Measures workers against the task, not each other
- Establishes fair, objective goals for the task, not historical tracking
- Increases facility performance over 100 percent of standard

says. "It gives the operator credit for performing all those steps."

GENCO and its engineering partner—Argent Consultants—utilize computer-aided time/motion studies to develop discrete labor standards. Through multiple regression analysis/work sampling along with management-based observations and computer-aided data collection, reasonable expectancies are developed and applied.



Case Study Results

• Distribution Center

- Activities—receiving, put away, case pick, pallet pick, replenishments, deplenishments and shipping
- 585,000 square feet
- 122 workers
- Three shifts

• Within 6-8 months after installation of 3PR (case throughput)

- 10.2 percent productivity increase
- 7.7 percent decrease in non-productive hours

• 16 months after 3PR installation (case throughput)

- Implemented ELS
- Additional 9.9 percent productivity increase within seven months of installation of ELS

"Because everything is spelled out within 3PR, it helps to make the process mistake proof."

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Vice President,
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and Six Sigma Black Belt

ELS utilizes the XYZ coordinates of facility locations and factors in the number of pallets that may be in those locations. "That is all taken into consideration by the ELS during the development of the standards," Siefert

According to Siefert, the primary benefits of 3PR are increased productivity, efficiency and quality. Because ELS is based on specific standard operating procedures (SOPs), the improvement in quality is realized since every step of the process is required to be followed. "Because everything (SOPs) is spelled out within 3PR, it helps to make the functional

process mistake proof," Siefert says.

"We're trying to make it simplistic.

By following the specified SOPs the quality increases. It avoids a workaround—where a worker may try to meet productivity and resolve a problem by going out of the designated steps—which, in turn, can lead to problems downstream." 3PR eliminates subjectivity and guesswork. It is an objective way to measure performance between workers in all functional areas in a fair and objective manner. It measures individual performance against a specific task, not against someone else's effort. 3PR not only helps identify wasted time and assists in managing processes and eliminating unnecessary steps, but also helps identify training and development needs for workers.

In addition, facilities that effectively utilize a 3PR system have the ability to operate

The more you measure, the more you improve.

Type of Standard

ROI Percentage

Historical (past performance)	0-10
Reasonable Expectancy	0-15
Engineered Standards	5-30
Individual Incentives	30-45

more weeks with a core labor force, since the increase in overall facility performance enables more work to be performed. Similarly, a 3PR system will also result in standardized processes across functional areas, improved accuracy of labor forecasting and increased service levels to customers.

However, it is vital that WMS and 3PR/ELS systems are linked. "At times, there may be quite a bit of data that a WMS system may not be capturing, which is required for the 3PR/ELS system to be effective," Siefert adds. "Subsequently, a customized interface between the two systems may be needed for it to work. For a successful 3PR system with ELS to function properly, it is very important to track multiple elements that normally are not accounted for in a WMS. One example would be the type of equipment that facilities use, since the speeds can be very different. All variables are accounted for when you utilize a 3PR with ELS. GENCO continues to build on its track record based on solid experience—we're currently working on our third and fourth 3PR installations."

Case in point - the benefits of a 3PR system

When GENCO recently installed a 3PR system at a major customer's distribution center, two targeted improvements were clear: increase productivity and decrease non-productive activities.

Within eight months, the customer had gained over 10 percent in productivity and decreased non-productive hours by over seven percent. Then, when ELS was added eight months later, an additional 10 percent of productivity was realized.

"On an LMS you are looking for anywhere between 5-10 percent in productivity gains and with ELS you are looking for an additional 7-12 percent," noted Siefert.



"This is what warehouse facilities must have to stay competitive in tomorrow's marketplace."

Gary Siefert
Vice President,
GENCO Strategic Technologies
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"In this particular case we realized 20.1 percent in productivity gains with the two working side by side. We were pleased with the results and, more important, the customer was very pleased."

Siefert pointed out that customers are always looking for providers to increase their productivity and overall throughput within the facility while lowering their costs. "It may include changing methods, reviewing process flows or modifying a process to do something different," he said. "But at some point processes become very stable and static, where you begin to max out productivity gains. When that point is reached, something will need to be infused into the operation that can take it to the next level of productivity. An LMS/ELS is part of that something. We're always looking for continuous improvement."

Innovations

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