

PROVIDING INNOVATIVE SOLUTIONS WHICH OPTIMIZE SPACE AND  
ORDER FULFILLMENT WITHIN THE SUPPLY CHAIN

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## Data Integration: The Future of Labor Tracking and Management (Part 2)

*Labor costs are continually on the rise and every minute of every day is affecting your bottom line. As managers, you're responsible for an overabundance of labor management processes, from recruiting and hiring to monitoring performance and progress. All the while, customer service requirements continue to accelerate, with shorter cycle times and more challenging value-added service requirements.*

The good news is that most of the information you need to effectively track and manage your labor force is available. However, the unfortunate reality that many companies face is that this information is not easily accessible and if it is, it resides in multiple systems—making it virtually impossible to do anything with it. Fortunately, in today's world there is technology available to help you combine and access this information.

In this second installment of our four-part series we are going to examine the different approaches to pulling in data, and how creating a labor management system with multiple data sources is the way of the future.

### WMS Data – A Limited View

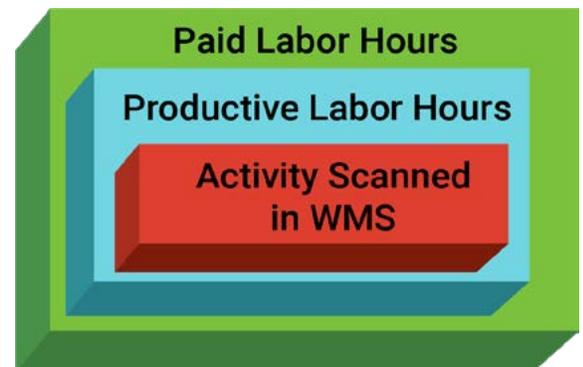
Traditionally, many companies begin tracking labor metrics through the use of a WMS system. Although WMS is a great place to start it only gives you part of the picture as it relates to your labor force. For example, your pickers are not always scanning, so you are only capturing what they're doing when they pull the trigger on that RF device. Labor is happening all over the facility, whether it be in the four walls of your facility, or just outside of it.

The diagram on the right is representative of we typically see in the industry. This is the total number of labor hours you are paying for, based on the time clock: who is clocked in and for how long, regardless of what they are doing.

In the second box, the blue box, we see productive labor hours. In most facilities we see that anywhere between 65% and 75% of total paid hours are productive. What that's telling us is that there's 25%-35% of paid hours that are non-productive. These non-value-added hours, during which you are not able to track what the employee is doing are essentially what we call a dark area or lost time.

In the third box, the red box, we see activity scanned into WMS. This red box comprises only about 40% of the actual paid labor hours. This means that with WMS alone, you are missing visibility to around 60% of the labor hours you are paying for.

So, adding data. What's the point? The more data you add, the more you understand your operation. The real goal in moving forward is to have 100% visibility, in terms of what your employees are doing, as part of the overarching system that you're running. Optimizing labor is critical prior to adding systems, because if you can't track your labor you can't understand where your status quo is, in terms of performance, and if you don't know what your status quo is in terms of performance, how do you know when you've gained productivity or gained value out of adding systems? *Continued on page 2*



## Data Integration: Part 2 (Continued)

When you optimize your labor tracking by using a Labor Management System, you gain such benefits as increased margin and cost control, and increased productivity and utilization. You also gain the opportunity to incentivize and recognize your employees through various programs. With LMS you can really optimize your labor planning based on true productivity. Tracking and understanding how people are actually performing allows you to develop realistic standards, optimize your systems and put incentive programs in place. Now you have a true idea of what your productivity is based on labor alone.

At that point you can evaluate whether or not you are going to use people to perform a task, whether you are going to evaluate new hardware, or potentially evaluate automation. With automation the question is often, how do I make sure I'm making the right choice? And how am I sure that I'm not following a fad? Will the investment today give me a leg up on the future? Or can I wait? The end goal for everyone is to create better service for your end customer, whether it be faster fulfillment, automation or data management you can provide versus asking them to provide it for you. Ultimately, maximizing productivity and adding technology is driving better pricing, so that you can remain competitive.

The key point is, that before you do any of that you have to make sure that you understand where you are today. A labor management system is critical in making sure you understand what your labor force is doing today, so that you can figure out whether or not you need to invest in technology, or people, or both.

Stay tuned for our next article that will look at integrating technology and labor analytics to tell a more complete story to get more value out of your system, and to understand opportunity moving forward.

## To Repair or Replace ... One of Material Handling's Great Questions

**One of the great challenges when it comes to managing a forklift fleet is knowing when it is better to repair a piece of equipment versus replacing it. Kenny Rogers coined it best in the song "The Gambler". Sometimes, you need to know when to walk away and when to run!**

The short answer to that question is, it depends. There are five key factors that should be considered when making this determination: Age, Environment, Application, Hours and Maintenance History. It is important to note that the information these factors show are best interpreted as a whole, as opposed to each specific element on its own. In short, the whole is greater than the sum of the parts.

- **Age:** How old a forklift is needs to be considered. As a general statement, as a piece of equipment ages the cost of ownership will increase. Warranties typically expire within the first three years of ownership and after the first five years of use it is not uncommon to start seeing major component failure/replacement. Additionally, the ongoing changes in technology can have an impact on the useful life of your equipment. In the last ten years forklifts have evolved, now utilizing things like AC motors, regenerative braking and lowering and other electronic advancements. Lastly, as a forklift ages, parts availability may become scarcer which will increase repair costs and increase downtime.
- **Environment:** Based on what type of environment a forklift is required to work in does have a significant effect on its longevity. Work areas with caustic or extreme environments will need to be cycled out more frequently and will be more expensive to repair. It goes without saying but there is a big difference between a ten-year-old forklift that is working in a freezer vs. a forklift that is used in a distribution building. Knowing what the life expectancy is of equipment in your specific environment is necessary when asking the repair vs. replace question.
- **Application:** Arguably this category could fall under work environment, but the fundamental difference is the environment is "where" the truck is being used whereas application is more the "how" the truck is being used. For example, utilizing a pallet truck to load and unload tractor trailers filled with maximum capacity pallets would have more wear and tear occur than using a pallet truck to transport light loads from one side of a facility to another over smooth concrete floors. Case in point, the truck transporting material from one side to the



other will eventually accrue more hours of use than a truck that is used at a dock, but does that mean the higher hour transport truck should be repairs/replaced before a lower hour dock use truck? Not necessarily. This is where not only application, but hours of use come into play.

- **Hours:** Total hours of use on a forklift is like an odometer on a passenger car. The question that may come up with a car with high miles would be "should I replace the transmission on my 200,000-mile car or is it time to buy a new one?". The same thing could be said about lift trucks. The problem is you must consider more than just the high miles, and this is where the application factor comes into play. Would you be using this car to tow heavy equipment for your small business or would this car be used to run errands around town? As mentioned earlier, the whole of the factors is greater than the individual parts.
- **Maintenance History:** The last factor that also needs to be considered is Total Maintenance History. It is critical to be aware of the maintenance history when asking the repair vs. replace question and has to do with more than just maintenance cost. You need to be aware of what type of maintenance has been done. Has the truck been on an ongoing scheduled maintenance plan? Has this truck had a history of accidents? What major components have been repaired? Is there a history of intermittent issues? What have been the most common repairs? All these factors will help determine if it's time to continue repairing or if it's time for a replacement.

Making the decision to repair or replace is an important part of ensuring your forklift fleet is operating at optimum cost and performance. Understanding all the elements that both make and drive overall cost of ownership will ensure that when the time comes you are making the best decision. The key to doing this effectively is not to look at each factor individually but how all of them come together in your specific operation. Understanding what exactly those factors are and the relationship between each will ensure you are making the best decision when the time come to make the decision on whether to repair or replace.



## Upcoming Events

### Event:

ProMat 2019

### About:

Discover the latest solutions to move your business forward as the industry's leading innovators showcase their latest manufacturing, distribution and supply chain equipment and systems. ProMat is where manufacturing and supply chain professionals come to find their supply chain WOW – that trend or technology that will take their supply chain to the next level of success.

### When:

4/8/19-4/11/19

### Where:

Chicago, IL

### Register

[www.promatshow.com](http://www.promatshow.com)

### Event:

Loyola's Supply Chain Leadership Conference

### About:

This one-of-a-kind, full day, live event will bring together supply chain experts and professionals from a wide variety of backgrounds and industries to discuss today's hot supply chain topics. With a broad array of educational sessions, solution applications and peer-to-peer networking opportunities, this is a can't miss event for every supply chain leader.

### Location:

Addison, IL

### When:

June 6, 2019

### Register:

SAVE THE DATE

## 10 Questions to Ask Before Purchasing a Carton Flow System

Carton flow can be an invaluable tool for efficient, space-saving order fulfillment of cartons and each items. Here are some of the key questions you need to evaluate in order to establish the best carton flow racking for your operations.

**1. How many SKUs do you expect to handle in your carton flow system?** The number of SKUs play a critical role in defining system configuration, including the number of lanes and shelves needed per bay.

**2. What is the velocity of SKU fulfillment?** SKU velocity is another major design factor needed to further define your carton flow configuration.

**3. Are the boxes a consistent or varying sizes?** The answer will help narrow down the carton flow track types you need.

**4. Are there totes and what are those sizes?** Totes are a great option for each picking from carton flow rack.

**5. What future growth are you planning for?** No one can predict the future, but with a good understanding of your long-term plans you can better determine a system to handle current volume and accommodate future product.

**6. What is the carton weight range that will be loaded into the system?** There are several designs to accommodate different product weight ranges.

**7. Are you planning on dividers for your system?** Dividers provide a quick visual product separation and support orderly SKU sortation. By making SKU locations quickly and easily visible from both the pick and the replenishment sides of the system, you can boost pick time and accuracy.

**8. What is the surface area of the container?** This will help determine wheel configuration, wheel spacing and the type of wheel for the system.

**9. Will the system require brackets and connection methods?** There are carton flow systems available to handle a variety of picking and storage needs – within shelving, pallet rack and pick modules.

**10. Consolidating SKUs into rack or pick module?** A pick module combines pallet rack, pallet flow and carton flow with additional material handling solutions in a complete system designed to optimize product flow.

Ultimately the decision to purchase a carton flow or any other material handling system can come with a set of challenges, but the more information you have up front the better position you are in to make the best decision for you company.

## Technology That Makes Your Employees Safer and More Efficient

**In a world in which we demand more performance and output from fewer employees, you can inadvertently open the door to an unsafe or unproductive working environment.**

**The below advances in technology have been proven to improve operational safety while continuing to meet or improve upon the efficiencies of your labor force.**

**Safety Blue Lights:** These lights work by casting a bright blue light on the ground in front of, or behind a forklift while it is in operation. This light warns pedestrians and other operators of a forklift operating in their vicinity. These are more effective than back-up alarms or strobe lights as they cast a definite location mark on the ground as opposed to alarms that echo throughout the warehouse making it impossible to know exactly where the forklift is approaching from, or strobes, which reflect off the surrounding structures again making it difficult to locate the truck. These lights make your employees and operators safer by providing them with an accurate location of the forklifts around them.

**Red Zone Safety Lights:** This system emits a red beam about 6 to 8 feet in length along the side of the forklift giving pedestrians in the surrounding area a visual "do not cross" line that keeps them back a safe distance from the forklift, preventing

foot injuries or collisions. This system, combined with the Blue Lights will put your forklifts in a virtual wall of safety, ensuring your employees stay safe and productive.

**Integrated Vision Systems:** These can either be mounted as backup cameras on larger forklifts, or they can be mounted behind or near the forks to allow the operators to see the position of the forks when picking up or placing loads. This is especially useful for the operators as the reach trucks we produce are approaching and surpassing 400 inches of elevation. An operator trying to see where to place a load that high in the air would be difficult to say the least. These cameras when properly used will provide the operators with an unobstructed view of where they are placing the load without having to peer upwards at a severe angle trying to locate the load. This can increase the operator's safety and efficiency by allowing them better visibility thereby decreasing product and rack damage while allowing them the increased visibility to allow them to place the loads faster.

Utilizing one, some or all of the systems above will be sure to improve the safety of your facility, increase the performance/efficiency of your employees or both!



## Associated University

Associated University is designed to provide supply chain management professionals with access to information on practical solutions concerning the industry's current hot topics.

This resource creates an interactive community that enables professionals to gain access to information covering today's most relevant supply chain management challenges and technologies. In addition to these sessions, Associated University offers tools, articles and discussions aimed at providing you with a vast library of resources to utilize.

These can be viewed at:  
[associated-solutions.com/  
associated-university/videos](http://associated-solutions.com/associated-university/videos)

## About Associated

Celebrating over 55 years of providing customers with innovative solutions that optimize space, labor and order fulfillment operations within their supply chain. Associated understands that handling materials in the supply chain should be more than material handling. By utilizing their unparalleled experience and industry best practices they are able to evaluate current methods and processes for storage, order fulfillment, labor and equipment utilization and recommend practical strategies to enhance their effectiveness and reduce overall cost.

Featuring leading-edge engineering, fleet optimization, material handling equipment and labor management solutions to complement industry-leading sales, service, rentals and parts, Associated has been the recipient of multiple awards in recognition of being a premier organization in the supply chain industry.

### Our Locations:

Illinois: Addison, Bloomington

Indiana: Indianapolis, Fort Wayne

Iowa: Ankeny

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Wisconsin: Milwaukee

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