JOURNAL OF
INTEGRATED
SUPPLY CHAIN
SOLUTIONS

QUARTERLY

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

In This Issue

Data Integration:
The Future of
Labor Tracking and
Management: P.1

Data Integration: The Future of Labor Tracking and Management (Continued): P.2

How Consultants
Can Help to
Maximize Your
Software Investment:
P.2

Benefits of a Forklift Battery Management System: P.3

Tips for Proper Pallet Maintenance and Storage: P.3

Upcoming Events: P.3

About Associated:

Associated University: P.4

Data Integration: The Future of Labor Tracking and Management

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 many companies face is that this information isn't easily accessible and if it is, it resides in multiple systems—making it virtually impossible to do anything with it. The silver lining is that in today's world there is technology available to help you combine and access this information.

In this four-part series we are going to explore where Labor Management technology is going, the various types of data available, and how to effectively use that data to manage your labor force.



Data Tells a Story

The historical methodology for looking at labor metrics has been through utilizing WMS and/or ERP information. However, as we look forward, hardware—whether it resides on forklifts, conveyors, semi-trucks or other types of industrial equipment—are having more and more embedded software.

All that software is tracking and reporting some type of data, for one purpose or another. However, much of this data can be leveraged to tell a more complete story about your labor. Technology is rolling out faster and it is becoming less expensive. In today's world, data is king, so it's important to understand how to utilize it. First you must understand where your baseline is today, and what steps you should be thinking about both in terms of specific technologies and the general mindset of how you plan for the future.

Labor, software, hardware and automation not only coexist, but are actually interdependent in that the combined data from all these systems provides valuable information about where you are spending money, how your labor is performing, and what decisions you should be making for the future.

Internet of Things

Essentially, the Internet of Things (IoT) is the concept of all systems around you creating data and tying it all together.

If you think about an average person's home, many people have already started to integrate various devices that fall into this Internet of Things category, such as voice-activated speakers. Perhaps you have an app that controls lighting in your bedroom or living room. You might have a thermostat you can control from anywhere on the globe. All these systems that were traditionally analog are now being connected via internet to applications, and you can already start to see how all this data combines together.

Maybe two years ago, each one of these systems was controlled by themselves through a specific interface designed specifically for that system. Now if you look at what's being offered in the marketplace, we are actually looking at integrated systems. You have a single interface that controls everything from your temperature, to your refrigerator, to your lights.

Continued on page 2

Data Integration (Continued)

The idea is that not only do all these systems create and receive data, but that the future is really understanding how they all interconnect instead of being stand-alone systems.

Similar to your home, a distribution center also has a wide variety of different data points coming from a multitude of different systems. You might have time clocks, which is critical because that can be your benchmark for understanding what labor is out there, how many hours you're paying for, and how much you're spending on that labor.

From there, we need to examine the other devices and systems you may have. This to ensure that we understand what types of information you have access to and how that data can be used to better understand your labor force. Depending on how your facility is designed, these other systems may include telematics systems, ERP software, job coding as well as other internal technology.

No matter what systems you're currently using, when it comes to distribution the value of the IoT lies not only in tying together the data coming out of your systems, but also making sure you can retrieve that data so you can get the right information to the right people. You need to be able to access all of this valuable data in order to get the full benefit out of it.

Everyone in the industry is evaluating what they should be doing in terms of labor tracking, and they're trying to find the best solution for their operation. Everyone's operation is a little different, the systems they're using are different, and truly finding the sweet spot based on your industry, labor needs and client base is simply a process that everyone is going through.

Stay tuned for our next article that will look at the different approaches to pulling in data and how creating a labor management system with multiple data sources is the way of the future.



It is first important to determine what we mean by "consultant". Some businesses view them as a necessary evil. Others believe they are a waste of time and money. They think, "Why hire a consultant to tell me what time it is when I can just look at my watch?"

The formal definition of a consultant is "a person who provides expert advice professionally". There are many reasons to hire a consultant, from providing guidance on a project, to performing a specific task, to being a source of expertise that does not currently reside within your company.

Consultants are unbiased third parties as they have no vested interest in relationships or "the way we've always done things". Consultants view themselves as problem-solvers, whether the problem is one that management can't answer or one purely of a need for additional capacity. Consultants see their roles as helping the client become aware of what is happening through their observations.

In today's world of Big Data and Software as a Service (SaaS) the benefits of hiring a consultant are endless. While a company may have the internal understanding of its own operations, having the ability to effectively obtain and dissect information is a challenge that many companies are not prepared to handle. Collaborating with a consultant can provide the fastest path to success. This article examines some of the reasons companies have been choosing to hire consultants over utilizing their own internal expertise.

First, consultants offer the ability for clients to have subject matter experts that can provide comparative data to give you a perspective of other similar industries or environments. A consultant can take your data and vet it against other like customers and industry standards to assist in establishing a baseline for your operation. Having the insight to your operations from a third-party point of view can assist in creating realistic expectations and goals.

How Consultants Can Help to Maximize Your Software Investment

A baseline will allow your operation to stay focused, and your consultant can help guide your organization in an effective manner, until which time trendlines from your own company's data can be used.

Secondly, consultants can look at key information such as cost drivers or performance metrics and determine the reasons behind what is driving them. The right consultant has the insight to assist in determining what the real causes to an inflating trendline are, or rising costs in an area not directly seen before the new solution was in place. While many companies have internal data analysts to assist in data mining, they oftentimes lack the internal expertise to determine what decisions to make as a result of the data. A consultant can offer expert knowledge to determine root causes, lead the charge towards the underlying issues behind the data, and usually push harder than anyone else can to root out the cause. Not only finding the cause, consultants often have the experience to know where to source the solution if it's not contained within an organization or their own tool bag.

While consultants can provide a great value and help lead you further towards success, having your own champion(s) internally is a necessity to allowing them to succeed. Oftentimes, a product or service is purchased by a company, with no previous experience to properly handle or get the most value from the product. Having people in place to train and support a consultant will maximize and expedite the value from this service. Too often, projects lose their momentum because a company does not devote the resources to support the investment and the changes necessary to make it a success.

Overall, a consultant can be a key asset to the success of an existing or newly-purchased SaaS or subscription-based software / hardware solution. Looking to build on the momentum and excitement of this investment, they provide the direction towards the biggest success. Looking to revitalize the benefits of a system already implemented or purchased? Try looking for a consultant specialized in this area to assist in creating momentum to achieve the largest gains possible from an investment of this nature. Be sure to have the internal support and team members in place to help make the policies, procedures and changes necessary to maximize the value from a consultant.



Benefits of a Forklift Battery Management System

There is no question that forklift batteries are a vital part of keeping your business moving. And with today's ever-increasing lead prices, it doesn't pay to continually purchase new batteries.

Even though forklift batteries are a major contributor to your lift truck's life and productivity, the maintenance of these batteries is often a second thought until it's too late. When a forklift battery isn't properly maintained, its life is greatly reduced and its run hours begin to get shorter and shorter. This will ultimately result in increased downtime and decreased productivity.

However, there are tools

available today that could help you ensure your batteries are maintained properly, and could increase battery life up to 25%.

One of these tools is a Battery Management System. A battery monitoring system allows you to remotely monitor battery operating parameters across your entire forklift fleet to avoid unscheduled downtime, maximize utilization and extend the life of your batteries. It has the ability to quickly identify undesirable battery conditions and areas of concern to facilitate discussions regarding warranty issues with your forklift battery vendor.

Ultimately, a battery monitoring system can increase productivity, reduce battery maintenance and reduce replacement costs by:

Minimizing electricity consumption

- Avoiding overheating, over discharging and other conditions that could cause battery damage or void battery warranties
- Giving operators accurate "fuel gauge" readings to help guarantee timely charging
- Ensuring that only the appropriate battery is placed on a given truck
- Collecting and analyzing data for recordkeeping and overall forklift fleet management

Having your batteries operate at peak efficiency is a key component to running the most efficient and effective fleet possible. This depends on timely charging, cooling and watering, and periodic inspection. The key to performing these tasks well is to monitor the battery consistently, not just react when damage has already been done.

Upcoming Events

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. Whatever manufacturing and supply chain solutions you need to succeed, you'll find them at ProMat 2019. Come see what's next. Come find your WOW.

When: April 8-11, 2019

Where: Chicago, IL

Register:

www.promatshow.com

Tips for Proper Pallet Maintenance and Storage

We have often heard of neighborhoods losing many if not all of their trees due to infestations, such as the Asian long-horned beetle, emerald ash borer and other wood-boring insects.

However, these same pests can infect your warehouse, disrupt your supply chain and cause significant costs to be incurred. These pests invade your supply chain through pallets brought into your facilities. In addition, fungi, viruses and other contaminants can taint your pallets and disrupt your supply chain.

In a warehouse setting where wooden pallets or packaging is stored, pests can invade that product. Items can be destroyed before they reach the consumer, causing loss of inventory and revenue. And what if that same product reaches the consumer?

Pests and other contaminants can be devastating in the food or pharmaceutical setting too. If these products are infected the product cannot be used. Should this product reach the consumer it could lead to illness or death.

In both of these situations the ramifications do not just end at product loss. There is also financial damage to consider. In many cases of product recalls, lawsuits are filed—especially if injury, illness or death have occurred. In addition, there is the damage done to a company's reputation which can result in lost sales.

There are ways to prevent this from happening. First and foremost, check to ensure your suppliers are following guidelines set forth by the International Standards for Phytosanitary Measures. These guidelines include the International Plant Protection Convention (IPPC) logo, country of origin and how the pallet was treated.

Secondly, make sure the pallet has been treated, and it's important to know how it was treated. The chemical treatment methyl bromide cannot be used with any products that could be ingested. It's good practice to include on your purchase orders what method needs to be used on pallets for materials and/or product coming into your facilities. In addition, receiving staff should be trained on checking incoming shipments for the IPPC logo and how to handle shipments that don't meet your company's criteria.

Finally, pallet storage at your facilities should be reviewed and controlled. Pallets stored outside and uncovered are subjected not only to the weather, but also to animals in the area.

WERC Conference

About: Behind every forklift, scanned label and slotting software is a logistics professional dedicated to keeping the supply chain moving. WERC's Annual Conference and Solutions Center is where they come to refuel on ideas, knowledge and solutions. Join your peers from across the country and beyond to discover excellence and innovation.

When: April 28-May 1, 2019

Where: Columbus, OH

Register:

www.wercconference.org/



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: www. 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

Minnesota: Eagan

Wisconsin: Milwaukee

Contact Us:

877.638.8002

www.associated-solutions.com





133 North Swift Road Addison, IL 60101 877.638.8002 www.associated-solutions.com