Reduce Warehouse Labor Costs Using Supply Chain Technology

How Technology Can Be Used in Warehouse Operations to Keep Labor Costs under Control

Need a way to reduce costs in your warehouse? Labor is usually the largest cost in warehouse operations. Today, technology can play a powerful role in helping you to gain and maintain greater control over your labor resource dollars.

Technology can empower your workers to be more productive. By eliminating paper-based processes, warehouses can see a noticeable cost reduction. Paper based processes are more labor intensive and prone to error. Today, more supply chain businesses than ever before have incorporated technology into warehouse operations to help reduce labor costs, improve customer service and order fulfillment levels and help them remain competitive.

**Labor Management Systems**

A 2014 study conducted by Peerless Research Group for Logistics Management Magazine indicated that 47% of respondents received a 10-24% increase in labor productivity after implementing a labor management system and 16% received an improvement of over 25%

According to the Bureau of Labor Statistics, the turnover rate for warehouse workers is 36%. By 2018, the logistics industry will need to fill 1.4 million jobs (approximately 270,000 annually). This is challenging based on the current and projected shortage of available trained, skilled labor.
Here are some of the benefits of using a labor management system for your business:

- Improve labor planning and scheduling
- Increase warehouse worker accountability
- Provide real time data about your workforce and operations
- Aid in training new warehouse workers
- Reduced labor costs
- Increased ability to anticipate when and where more workers will likely be needed
- Improvement in individual warehouse worker performance
- Enhanced overall workforce productivity

**RF**

Radio frequency solutions rely on wireless networks and barcodes affixed to product containers to transmit information from products into warehouse management systems. Because picking and packing are two of the most labor intensive and costly jobs in the warehouse, replacing paper based operations with wireless automation can provide a reasonably quick payback on your investment. Using RF in your warehouse can also reduce or replace error-prone manual operations and help to improve order fulfillment rates and customer satisfaction. Because data flows continuously to warehouse workers, accuracy and labor productivity can be increased by eliminating wasteful trips to retrieve paper-based instructions.

**RF wireless systems** used with barcodes are now common in 3PL, warehouse and distribution and other supply chain businesses as productivity gains and accuracy rates tend to far outweigh the costs. Using **ruggedized mobile computing devices** can help your business increase operational efficiency, reduce labor cost and improve workforce productivity.
RFID

More and more warehouses have begun to utilize radio frequency identification (RFID) tags in daily operations. Wireless, RFID can help to increase the efficiency of warehouse operations as it does not require the manual scanning of barcodes to transmit information into a warehouse management system. To be effective in reducing labor costs, RFID does not have to be used throughout the warehouse or for all products. Using RFID portals at key gateways in the warehouse can help reduce the labor of finding lost inventory. This passive use of RFID is simple and cost effective. Inventory can be positioned in such a way between the portals so as to be tracked automatically without costly, labor intensive searches. This helps to provide more control over the movement and storage of goods within the warehouse, maintain customer service levels and help to optimize warehouse space.

RFID can also be used in an active fashion. Tags can be affixed to boxes of goods so that warehouse workers do not have to manually check the boxes against the manifest. Using RFID technology can help develop an easy to use paperless digital method of communication between warehouse workers and the operational systems used by the warehouse.

Voice Technology

One of the foremost labor saving automation technologies, voice solutions, help optimize existing workforces and reduce labor costs. Using voice technology solutions enables warehouse workers to do their jobs hands-free and heads-up. The impact of this is that worker safety and labor productivity tends to improve and error rates decrease.
Pick to Light Systems

These paperless solutions can help to increase labor productivity for picking and accuracy by reducing travel time. Reading errors are eliminated and the picking task is simplified. Pick to light can also improve accuracy and labor productivity when dealing with a multi-lingual workforce for which English is not the primary language. Here is how it works: Each product location has an individual alphanumeric or numeric light display and acknowledgment button. In addition there is a digital readout which indicates quantity. More sophisticated systems can include additional displays. Light displays direct warehouse workers to specific stock locations. Most typically, the picking sequence initiates at the beginning of a zone. The warehouse worker scans a bar coded address label that is affixed to the shipping carton or tote. This display provides information to the warehouse worker about which products need to be picked and the quantity of each. Once picked, the warehouse worker then confirms that the picks were done by using the acknowledgement button.

Put to Light Systems

These solutions guide warehouse workers to put stock in an order. Light displays notify the warehouse worker where and how to allocate stock to orders. This facilitates more efficient picking from bulk stock. First, the warehouse worker scans each product. Flashing light displays at each location define which containers require that product and identify how many items to put there. The put to light system then confirms results which are then updated in the system in real time for host system updates. Put to light systems can help businesses with multi-lingual workforces improve labor productivity and reduce error rates.
Conclusion

The cost of technology has decreased over the past decade. Many technology solutions are now much more affordable and can produce results reasonably quickly.

- Labor management systems
- RF
- RFID
- Voice technology
- Pick to light
- Put to light
Is a Labor Management System Right for Your Business?

1. Do you need a way of quantifying the performance of each warehouse worker?
2. Do you need more information visibility about the performance of your workforce?
3. Do you have established labor standards for procedures such as picking that all your warehouse workers must follow?
4. Do you have standards for training your workforce (who is trained and by whom; frequency of training, etc.)?
5. Has your business been recording labor performance data manually?
6. Would you like more labor data to help you simulate purchasing or changing materials?
7. Do you need more labor data to evaluate the head count needed for your operations?
8. Does your business need help with workforce planning?
9. Is your business in a growth mode?
10. Has your business been impacted by a shortage of skilled warehouse workers?
11. Does your company need to increase labor efficiency?
12. Is your workforce currently using automated data collection methods?
13. Do you need labor data for the purposes of calculating activity based costing?
14. Would you like labor data so that your company can implement or enhance continuous improvements efforts?
15. Is your primary concern having the means to reduce labor cost for your business?

If you answered yes to 2 or more questions, your business would be likely to benefit from implementing a labor management solution.
About Datex
Datex provides flexible, reliable supply chain technology solutions to help make businesses more profitable, including supply chain software, mobility solutions, professional services and mobile device management. In business for over 35 years, Datex has a wealth of experience in helping companies across the world meet these critical business challenges.

Datex Corporation
10320 49th Street North
Clearwater, FL 33762
datexcorp.com

For more information on Datex products and services, please contact us.

US Office – 1 800 933 2839
Canada Office – 1 800 998 8980