





As technology evolves and advances, it is imperative for organizations to optimize their warehouse and adapt to shifting trends. For example, warehouse operations can be optimized with an upgraded warehouse management system, leading to improved labor management and increased productivity. Likewise, matching your equipment acquisition model with your business needs will result in significant cost savings.

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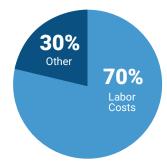
**Upgrade Technology** 



# 1 Integrate Labor Management

Labor costs usually make up the largest share of a warehouse's total operating costs, ranging between 50-70% of the average company's warehouse budget<sup>[1]</sup>. In some cases, companies will employ third-party logistics providers (3LPs) to try to curb costs, but even in these instances, costs linger around 50%.<sup>[2]</sup>

#### **Total Warehouse Operating Costs**



#### In other cases, high costs are a result of technology usage or lack thereof.

For example, a company may be using outdated legacy systems that do not work well in conjunction with other systems. It may even be the case that the organization is still tracking workforce schedules through spreadsheets and other antiquated means that are **error-prone** and do not generate an accurate view of workforce management<sup>[3]</sup>. Despite much-needed and long overdue upgrades, these companies continue to employ these systems year after year, leading to **inefficiencies and unnecessary costs** in the form of maintenance and repairs.

The fact remains that these organizations are facing **rising costs** and hence, **compressing margins**. They may embark on cost reduction initiatives, but without a comprehensive understanding of data that takes their entire warehouse's daily operations into account, there is no clear-cut way of knowing what can be cut, modified, or improved. This is especially troublesome for the companies who have disclosed identifying and improving productivity gaps and refining real-time labor productivity and visibility as the top two management practices they want to improve.<sup>[4]</sup>

### Top 5 Workforce Management Initiatives



Identifying and improving productivity gaps



Refining real-time labor productivity and visibility



Implementing or upgrading labor analytics/ software/tools



Tracking incidents and overall safety



Automating labor management processes

To counter these issues, Dwight Klappich, Research VP at Gartner, suggests integrating a labor management system (LMS) with a warehouse management system (WMS)<sup>[S]</sup>. An LMS is a combination of software and engineered standards that capture worker activity data to help define the most effective way to perform specific tasks. It uses metrics to track productivity for individual and groups of employees, and sheds light onto a company's needs, enabling it to be more proactive about labor planning.

By identifying areas of high performance and comparable inefficiencies, a labor management system integration can actually **reduce costs up to 30%**. [6] As Klappich explains, "the use of LMS is heating up. Where, in the past, a company needed 200+ employees or 'users' to justify the time, effort and cost of buying LMS, these systems are now capturing information [e.g., every time an employee 'does something'] and applying that logic in new ways. [7]



# 2 Optimize Operations

Warehouse operations are an integral part of an organization — they ensure that all stock is shipped and replenished in a timely manner. Without efficient operations, a company risks falling behind on orders, effectively lowering customer satisfaction and possibly losing business. To avoid this and to ensure optimal operations that reduce overall costs, cross-functional teams composed of people with varied skills and experiences should be brought together to accomplish specific tasks. Not only will these teams reduce the time it takes to get things done, but they often breed creative solutions that also improve the organization's ability to solve complex problems.

If excess inventory is causing problems, a Material Review Board (MRB) that functions to document, manage and track discrepancies with materials can be utilized. By reviewing obsolete, excess and slow moving inventory, improved efficiency and cross-functional communication can be achieved throughout the warehouse. Along the same line, data tracking can be enhanced by employing tools and software with analytics capabilities. These tools can lead to deeper insights into error rates, allowing the organization to optimize their operations by setting targets to reduce them.

As warehouse rental costs increase, warehouse operations are also progressively finding the need to optimize space. [8] These endeavors can be facilitated by utilizing the warehouse's entire height with racking and by making sure that regular slotting and re-slotting takes place (based on demand and sales trends). Slotting can also be optimized by assigning products to picking locations throughout the warehouse to improve total labor efficiency, and by organizing inventory in their most appropriate storage medium based on product type, which functions to minimize product losses due to damages incurred from placing heavy inventory on top of lighter inventory.

It is also important to set a target inventory accuracy of 98-100% by using radio-frequency identification (RFID), automatic identification and data capture (AIDC), and IoT-based technologies that improve SKU tracking. This ensures that all inventory is tracked with end-to-end visibility, which works to streamline the supply chain. Optimizing business processes and automating asset and inventory management can also increase efficiency and allow for asset and shipment tracking in real-time, with maximum traceability.

gave an example on how RFID has been used to benefit a business: "In a large production facility, eight different departments were requesting daily trailer moves. Trailer location, re-handling, and multiple moves wasted significant resources. The company installed a complete RFID system with fixed readers at gates and handheld readers for faster, more accurate automated yard management, cutting total costs by six percent." [9]



In fact, manufacturers and distributors who implemented RFID technology into their supply chain regularly see an 80% improvement in shipping and picking accuracy and a 90% improvement in receiving time. [10] Moreover, on average their inventory visibility and availability increases from 2% to 20%, inventory accuracy goes from 63% to 95%, and merchandise tagged with RFID can actually increase inventory count from 200 to 12,000+ per hour.[11]



## 3 Match Acquisition Model With Business Needs

An important aspect of managing warehouse operations is obtaining and allocating assets in a strategic manner that best aligns with the company's unique financial needs.

One of the best ways to maximize cash flow is to lease the equipment instead of purchase.

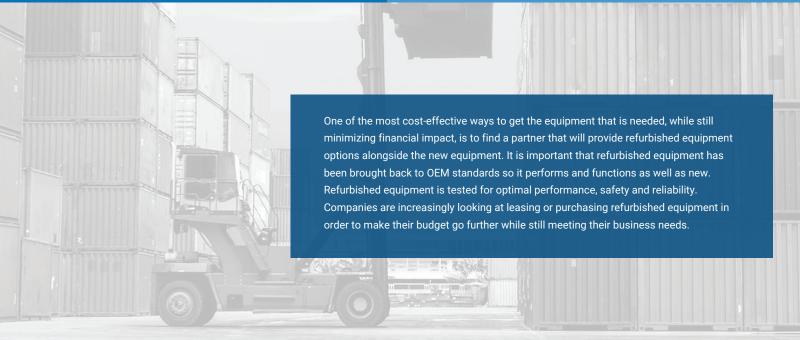
While purchase is the best route if the equipment has an extended life expectancy and will not become obsolete in the near future, it also requires an upfront capital expenditure to acquire the equipment as well as the costs to keep the equipment maintained properly.

The main concern with an equipment purchase is that an asset's total return plateaus with mounting maintenance costs and depreciation — a trademark of the purchase model. This issue is eliminated with a lease because there is no initial capital expenditure. There is also more flexibility with managing the equipment because upgrades can often be achieved without additional capital outlay.

Leasing is also beneficial in the long-run because lease payments are spread out over time, allowing free capital that would have otherwise been spent on the purchase to be invested in other areas of the business. And because lessors assume the burden of ownership, there is no need to deal with depreciation schedules or maintenance costs.

If equipment is needed on a temporary basis, a short-term rental may be the optimal solution. It may be the case that a project does not justify a purchase or a lease, and renting is a temporary solution without the long-term commitment that comes with ownership or a lease. Rentals are a low-risk, affordable option that guarantees equipment when it is needed.







# 4 Upgrade Technology

Companies everywhere want a positive profit margin with a high ROI. They also want to stay relevant to customers, which can be achieved by upgrading technology. Upgrading technology is an investment that often pays for itself in the long-run. Without upgrades, companies are stuck with older equipment that not only has a higher risk of failure, causing inefficiencies and delays in production, but in the case of lighting technologies, uses more electricity and requires constant upkeep to prevent from malfunctioning. Newer equipment often comes with advanced safety features that improve employee safety, curtail accidents and eliminate extraneous expenses.

To reduce expenses and save on electricity bills, consider investing in a lower energy system such as LED lighting. It's versatile and comes with a lower price tag than traditional fluorescent and metal halide lights. These lights have the added bonus of not emitting heat, leading to lower air conditioning costs. Intelligent LED systems also come with sensing technology that can restrict illumination when it is not needed. For example, Texas-based, Ben E. Keith Co., moved to a new facility with a smart LED lighting solution, which is expected to reduce energy usage by 90% versus high-intensity fluorescents, and 75% over plain LEDs. [12] Similarly, New York-based, Maines Paper & Food Service, saved 1.7 million kilowatts per year after replacing 400 metal halide lights with LED lights throughout the company's facility, reducing energy usage by 87%.

An upgrade to an advanced WMS will govern, monitor and control processes within a warehouse. A modern WMS that provides real-time data, inventory management, and tracking, minimizes the need to purchase excess inventory and paves the way for reduced safety stock levels. Labor costs are also reduced with improved WMS because they allow employees to be more productive.



**About 43% of SMBs** also make the mistake of not tracking inventory use or use manual processes to do so.<sup>[13]</sup> With IoT and similar technologies that can be used with an upgraded WMS, that becomes a thing of the past because tracking can be automated, increasing accuracy in ordering, picking, packaging and shipping.



### 1. Integrate Labor Management



A labor management system integration will identify areas of high performance and comparable inefficiencies, and can reduce costs by up to 30%

### 3. Match Acquisition Model



Leasing instead of purchasing can be a strategy to improve cash flow, opting for short-term rental is ideal if a project does not warrant an upfront large expenditure, and leveraging refurbished equipment instead of new is used to maximize savings

### 2. Optimize Operations



Warehouse operations can be enhanced with cross-functional teams, slotting optimization, and the introduction of RFID, AIDC, and IoT-based technologies, which can result in an 80% improvement in shipping/picking accuracy

#### 4. Upgrade Technology



Advanced technology allows the organization to reduce electricity costs by up to 90% and significantly decrease the cost of excess inventory

#### References

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