

The Future of Warehouse Management System: Latest Trends of 2021



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Introduction

Warehouse Management System, a term so simple yet so complex. The operations run on many levels, and each time someone is making an error in the warehouse. It is not their fault! In fact, it is no one's fault; imagine handling a warehouse of more than 10,000 products, calculating the quantities, organizing, checking the due dates, ensuring the correct delivery schedule. Apart from this, there are yet uncountable other tasks that carry out on a daily basis. Phew! It is tough! Sitting here and thinking about how they do it makes me worry for them. I can't help but wonder how I can help them? Is there anything that will ease their work? So yes! The answer is Yes! New technologies have immersed and brought in beautiful ideas to make our lives easier. Let us see what we can do.



What is Warehouse Management System

Warehouse Management System is the system that helps to smoothen and organize the warehouse management operations. It is the act of managing and controlling warehouse activities. This includes the day-to-day warehouse activities such as shipping and receiving, picking of goods, inventory control. Warehouse management helps optimize

the warehouse operations and goods. It makes sure that everything is taken care of until they are delivered or sold once the goods enter the premises.

Why is Warehouse Management System so complex

Warehouse management activities are highly complex and need ample assistance as they are the backbone or an integral part of inventory management. The most common problems and challenges that warehouse management faces are related to:

- Managing and Optimizing the warehouse space
- Accurately calculating the inventory
- Scheduling Deliveries and Purchase Orders
- Manage Fluctuations in Product Demand
- Manage Return Orders and Damaged Goods

And other than the challenges mentioned above, there are still countless other problems that individuals face while conducting their warehouse operations. But, thanks to technology, warehouse management can be more advanced and more accurate.



Future of Warehouse Management System

1. Warehouse Management Robots

Warehouse Management Robots is a classic example of automated systems, and they ease laborious jobs to a great extent. From transporting goods from one panel to another to streamlining the warehouse operations, the warehouse management robots can do it all.! Thus, it is safe to say that you save on time, energy, and human error. It helps increase efficiency and productivity by doing the same job a little quicker and more organized than the human workforce. There are various types of Warehouse Management Robots, mainly:

- Collaborative Robots: Also known as Cobots
- Articulated Robotic Arms

Both these types of robots help in picking, packing, and storage. In fact, the Cobots also come with sensors that help them with smooth navigation within the warehouse.



Source: 6RiversSystem

2. Drones for Warehouse Management System

We have seen drones being used at events and large functions such as weddings and corporate events. This technology is so good that it can be used as a modern world application in warehouses. Drones are known to be 50 times more powerful and faster than manual handling of warehouse activities. This way, organizations can save a lot on efficiency and time. The drones scan and record each barcode on every panel, thus, capturing their product details, location, and relevant information.

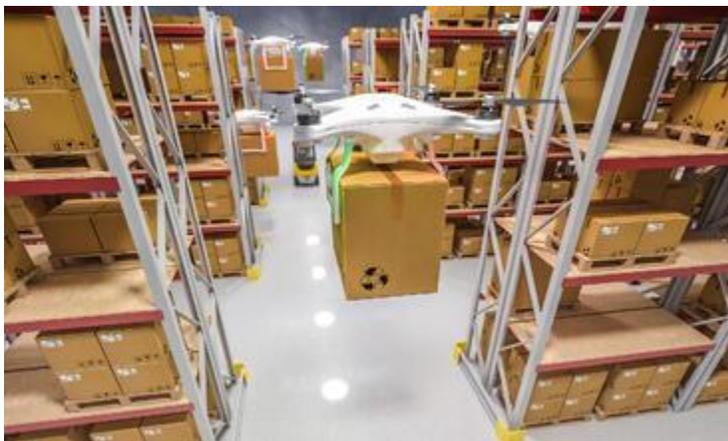


Image Source: FreightPOP

3. Smartphones for Warehouse Management System

Smartphones for Warehouse Management are widely known as Mobile Warehouse Management Systems. We have seen technology progress in the past couple of years, from tracking inventory through paper and pen to using computers, then laptops. But, now, everything is possible on the go with our smartphones. We can do all and any kind of work with the help of our smartphones. These days with smartphones, we can scan QR codes, capture data, track inventory and productivity, and install workforce applications to ease the working process. This way, you can always track the most recent information, receive real-time updates, and have the warehouse management operations at your fingertips.

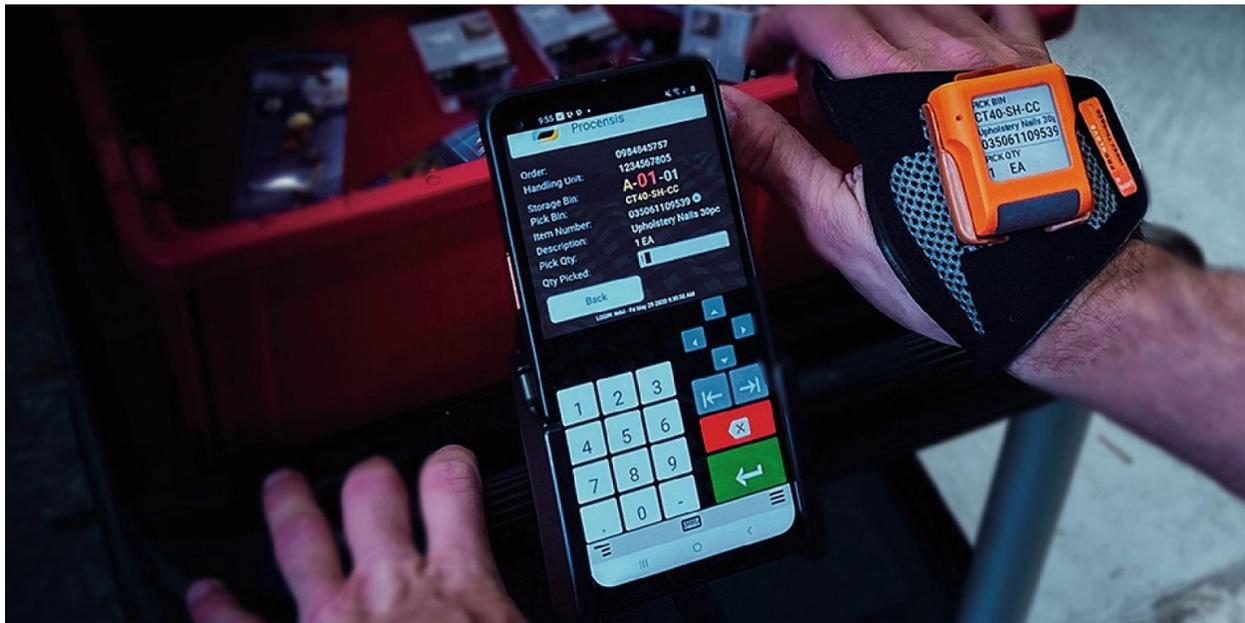
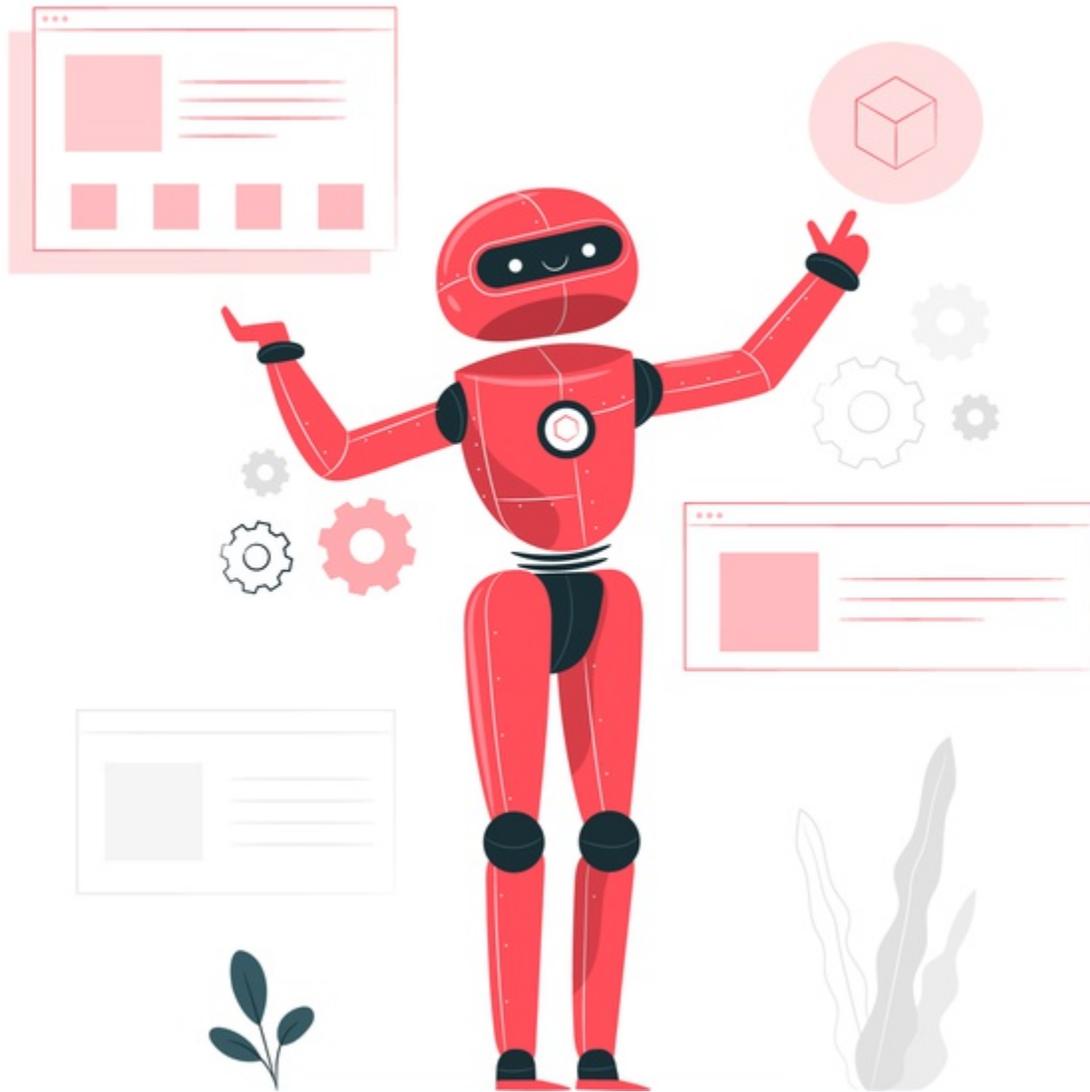


Image Source: Insight.Samsung

4. Real-Time Inventory Management for Warehouse Management System

Real-time inventory management will resolve most inventory-related issues and focus more on providing real-time and accurate information. Thus, this is the lifeline for a sustainable and robust warehouse management system. When the warehouse generates real-time data on inventory, picking, packing, and shipping, the organization gets a clear

picture of the current inbound and outbound goods. Thus, they can order more products in advance and keep the inventory flow running smoothly. Real-time inventory also gives a clear picture of incoming and outgoing inventory, damaged goods, returned goods, and customer reviews.



5. Wearable Computers for Warehouse Management Systems

The wearable devices are small screens or computers fitted on the arms or wrists for easy accessibility. These devices, though, look small but are equipped with software,

voice recognition, or even Bluetooth functionality. They help with easy picking and sorting of goods, entering prices, and scanning products. These wearable devices help with inventory management and increase productivity and efficiency along the way.



Image Source: Zebra

6. Smart Forklifts and Automated Vehicles

Smart Forklifts and automated vehicles have acted as a blessing to the warehouses and organizations. They have rapidly reduced the need for human resources and manual assistance, and thus, productivity and efficiency have increased. Smart Forklifts and Automated Vehicles have the ability to place the goods on their designated shelves and also pick the assigned items from their allotted spaces for deliveries.



Image Source: Forbes

Conclusion

The future of [warehouse management](#) and organizations is to be steady with the current scenario and trend. The current trend will help companies immensely to distribute their workforce and resources efficiently and increase productivity with all the latest technologies in the market. At the end of the day, the higher the productivity, the higher the profits. Thus, it is crucial to stay in the loop and learn the latest trends, understand the ones which will benefit the company, and implement them.

References

[Challenges faced in a Warehouse Management](#)

[Know more about Warehouse Robotics](#)

[Benefits of Warehouse Forklifts](#)

[Factors contributing to the future of warehouse management](#)

[Importance of Automation in Warehouse Management](#)

[Benefits of Warehouse Cobots](#)