How Augmented Reality can improve on-time Order Fulfillment?

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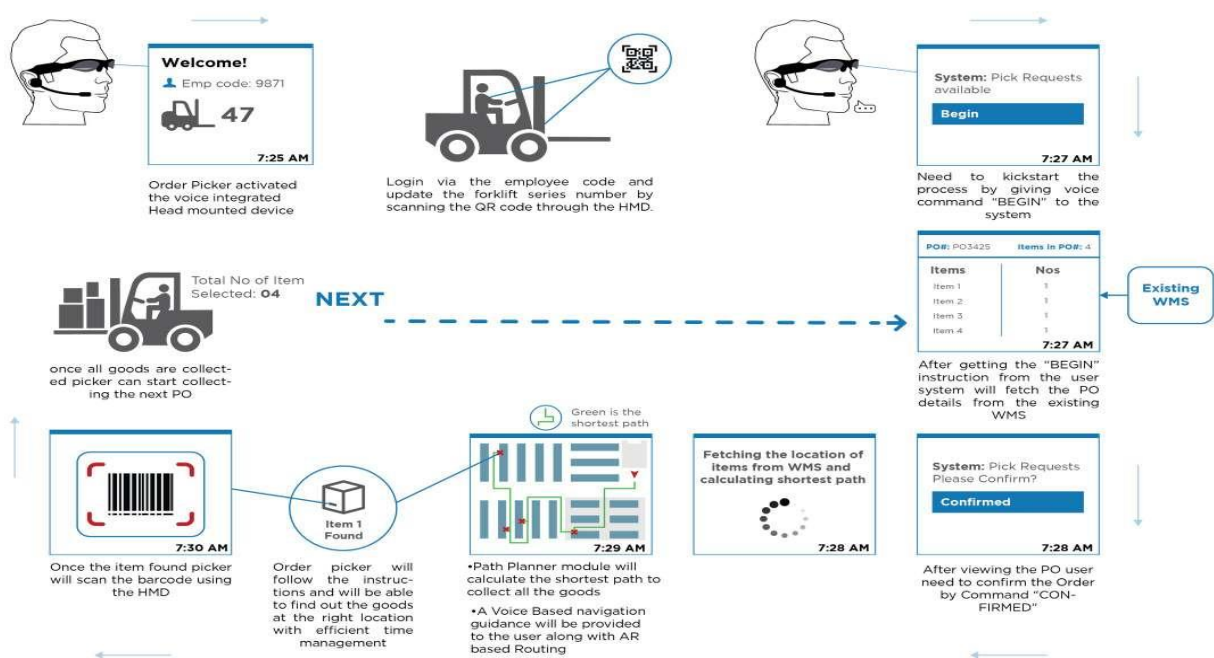

With the recent advancements in the Next-generation technologies, companies who adopt Augmented Reality based picking into their Warehouse floor will immediately have a competitive advantage over those who do not. The effective management of warehouse operations can be critical for the overall performance of the supply chain they belong to. In response to this, several decision support models, that assist warehouse managers in scheduling and controlling their warehouses, have been developed for warehouse operations. In the last two decades and with the emergence of computer systems, the deployment of information and communication technologies has often been suggested as aneffective solution to managing warehousing operations.

A Warehouse management system provider wanted to develop a highly efficient and accurate solution for order picking. A voice-enabled support system also needed to be integrated along with the WMS for increasing productivity. The functional beauty of warehouses is that the team always knows where the equipment is, and what the inventory levels are. Also to avoid the expensive picking mistakes that occur when inventory is not where it is supposed to be. Gadgeon offered the opportunity to eliminate the time-wasting errors which will pave the way to unnecessary costs.

GadgEon's Next Generation Order Picking Solution is targeted to address the limitations of order fulfillment in a warehouse. In this solution, a voice-activated command, Next-generation

technologies like AR based Headgear and Automated Pathfinder can be seamlessly integrated with the existing WMS.

- Communicating clearly with the picker via an audio and visual display at each step of the picking process.
- PathFinder module will help in routing the shortest path in picking all goods in a PO.
- Scan the item's object code (QR code) at the front of the HMD.
- Processing the scanned information and sending the appropriate request to the online warehouse management system.
- Receiving the response to the request sent and showing appropriate instructions to the picker

Benefits of implementing AR-based Order picking solution in Warehouses

- Head-mounted devices (HMD) or smart glasses are of interest from an industrial point of view as they offer a hands-free solution. At the same time, they can give the opportunity to the user to communicate effectively with the physical world while wearing them which is crucial in industrial applications like order fulfillment.
- With a warehouse management system, every item is scanned into a location and as it is integrated with a voice-enabled support system and Automated Pathfinder along with AR technology when a picker is looking for an item, the routing and planning will help in locating the item at the correct location.

- Get a goods-in track record accurately for the first time itself by scanning all goods. Using HMD in the warehouse will make it impossible to pick the wrong item or the wrong quantity. With every incorrect pick, there will be an error message, alerting the person of their mistake
- Non-prioritization of order could often result in scenarios where high priority order in the queue being left out for most recent orders. Another potential problem that could arise is when orders which could have easily fulfilled being blocked by half picked orders being put back for non-availability of remaining items. With the right warehouse platform in place, correct planning and prioritization of orders can be done.
- A dynamic location is possible if WMS is introduced. So that multiple stock-keeping units (SKUs) in one location, as well as putting single SKUs in multiple locations will help to allocate high-demand items closer to the pack bench when necessary and will make much better use of the space in the warehouse.
- As the location of the product is recorded via WMS it's easy to locate the product. Which will also help in picking different products in one pick run.

Time is the key to the efficiency of any warehouse processes. To ensure the picking orders happen as quickly as possible, you will need a clear and coherent system of inventory allocation and visibility within the warehouse. Visibility has been always a challenge for large storage facilities. Adopting technology for the sake of it will not yield any benefit. Choosing the right technology partner who can deliver the tailor-fit solution for your requirements rather than going behind the hype of any technology.

Gadgeon Smart systems is a trusted partner you can rely on. Please learn more about us on www.Gadgeon.com

Gadgeon Systems Inc.