

2024 Warehousing Vision Study results released

Zebra Technologies Corporation, recently announced the results of its 2024 Warehousing Vision Study, analysing IT and operations decision makers' current and planned strategies for modernising their warehouses, distribution centres and fulfilment centres.



The study reports on the forward-thinking fulfilment strategies companies are focusing on to keep up with the growth of the on-demand economy.

Both automation and worker augmentation solutions will be a key focus for decision makers' plans during the next five years. More than three-quarters (77%) of respondents agree that augmenting workers with technology is the best way to introduce automation in the warehouse, but only 35% have a clear understanding of where to start automating.

Eighty-seven percent of decision-makers are currently in the process of or planning to expand the size of their warehouses by 2024, with 82% anticipating an increase in the number of warehouses during this timeframe.

"IT and operations decision-makers are prepared to meet this heightened demand over the next five years by taking an incremental approach to modernizing their warehouse operations, in which they will first work to improve individual and team productivity while achieving workflow conformity," said Mark Wheeler, director of supply chain solutions, Zebra Technologies.

“ By 2024, leaders will shift their focus to the integration of more holistic solutions to build data-powered environments that balance labour and automation in the warehouse, ultimately empowering front-line workers with a performance edge to lead the way.” ”

By 2024, automation will enhance worker performance rather than replace workers

Key findings

- Sixty-one percent of decision makers plan to enable partial automation or labour augmentation with technology in the warehouse.
- Three-quarters of respondents believe human interaction is part of their optimal operational balance, with 39% citing partial automation (some human involvement) and 34% citing augmentation (equipping workers with devices) as their preference.
- Decision makers anticipate using robotics/bots for inbound inventory management (24%), outbound packing (22%) and goods in/receiving (20%) by 2024.

Rethinking fulfilment strategies and operations to meet emerging challenges across the warehouse remain a top priority

- Fifty-nine percent of respondents cited capacity utilisation as a significant expected challenge and plan to address it by expanding the size of their warehouses.
- Sixty percent of organisations cited labour recruitment and/or labour efficiency and productivity among their top challenges, with 63% of respondents noting an immediate focus on individual or team productivity outcomes.
- IT/technology utilisation was identified both as the most anticipated operational challenge (61%) of the next five years and a desired long-term outcome for increased asset visibility, real-time guidance and data-driven performance. As warehouses expand, so will the volume of stock keeping units (SKUs) and the speed items need to be shipped. Decision makers will seek increased visibility and productivity by implementing more robust returns management operations (81%), task interleaving (80%), value-added services (80%) and third-party logistics (83%).

The investment and implementation of new technologies is critical for remaining competitive in the on-demand economy

- Almost half (46%) of surveyed respondents cited faster delivery to end-customers as the primary factor driving their warehouse growth plans.
- More than three-quarters (77%) of decision makers agree that they need to modernise operations across the warehouse to remain competitive in the on-demand economy but are slow to implement new mobile devices and technology.
- Seventy-three percent of companies are currently modernising their warehouses by implementing or refreshing mobile computers, tablets and barcode scanners.
- By 2024, modernisation will be driven by Android-based mobile computing solutions (83%), real-time location systems (RTLS) (55%) and full-featured warehouse management systems (WMS) (54%).
- Sixty percent of respondents cited mobile barcode label or thermal printers as a key area of investment as part of their plans to add, expand or upgrade devices in the next five years.