

When first introduced in the 1990s, voice picking changed how many industries picked product. As warehouse management systems (WMS) became mainstream, transitioning operations from paper-based pick processes to hand-held devices was prevalent. In many industries this posed handling challenges as workers tried to balance data input utilizing their RF device as well as handling product. Add-on to that, the challenges of gloves for temperature-controlled environments as well as language and reading proficiency variability within the workforce, voice picking solutions provided an alternative that helped to overcome some of these challenges, gaining efficiencies and improving safety. Over 25 years later, voice only technology has improved, but does it still lead as the best hands-free option?

A strong challenger has entered the market with Augmented Reality Smartglasses. Many have termed this Vision Picking, but just as voice processing expanded beyond picking, vision-based processing has infiltrated all warehouse processes making an impact on efficiency, accuracy, and employee training along the way. By introducing vision-based guidance alongside voice instruction, this technology is quickly displacing traditional voice-only solutions. Smartglasses introduce a small display in the line of site of the worker. By overlaying this with their natural view of their environment, additional visual assistance and line of site instruction can be provided to the worker as they perform their job tasks. Providing clear instruction, visual overlay for navigational support, and the display of product images are only a few of the advantages of vision-processing that has had an impact of employee performance and accuracy.

One of the largest benefits is improvement in the user training experience and ramp-up of employee performance. Using multi-sensory guidance, employees are no longer required to rely on just one method of instruction. Vision-processing allows for the worker to receive instruction through visual clues (guidance, images, text) and voice. By introducing a more intuitive method of providing instructions, employees can more quickly learn their job function. This technology also combats the challenges of a multi-language workforce. Vision processing leverages native language (most Smartglasses support numerous language options), gesture recognition (think of a "Thumbs Up" for a pick confirmation) and high-speed barcode recognition. In addition, most glasses support connected devices such as finger trigger scanners, if traditional barcode scanning is needed within the operation.

Not only do vision-based solutions aid in user directions, but they also leverage the additional benefits of having a camera on-board. Just as the introduction of cameras in Smartphones has changed how consumers engage with the digital world, the camera on the worker opens doors to transform worker impact within the overall operation. Think of the possibility for remote support by "calling into" a live stream of a worker's session to have direct visibility to the live environment as well as the computer instructions. This capability is redefining how inventory management, training, and coaching is being performed in the warehouse. Have an issue with customer chargebacks? The ability to take photos and videos throughout the process to capture a true audit trail or provide additional information to your customer is unlocking a world of new potentials to combat the increase in these penalty charges.



So, is this technology ready for prime time? Will it work within a fast-paced operation and be able to "keep up". The simple answer is "Yes". As with all technology, there are considerations to think about to make sure the solution is right for your environment and operation, but an increasing amount of distribution centers are replacing hand-held and voice-technologies with vision to improve speed, quality, audit and training. Vision-processing is the next generation in worker-enablement technology and should be considered when evaluating technology replacement within the warehouse. As this technology will continue to improve, the advantages will continue to prove this solution is the next generation of hands-free processing.

WHY VISION PICKING WILL REPLACE VOICE PICKING



Speed & Accuracy

- Provides clear visual guidance & confirmation including navigational guidance and product images
- Decreases ramp-up time to meet performance standards
- Hands-free



Less Language Dependency

- Supports vision, voice and text
- Displays product images as further validation
- Supports numerous languages (without voice training)



Reduction in Training

- Intuitive Instructions
- Flexibility in methods to direct or confirm action (including gesture, OCR, scanning, voice)



Video & Image Capture Reduction in Customer Imposed Penalty Charges - Ability to capture video and/or images throughout process steps to provide further documentation against inaccurate penalty charges



Extend Beyond Picking

- Remote support or training view employee's screen in real-time
- Ability to use technology in other job functions (packing, sorting audit, receiving, inventory control, etc)

This article was published in sponsorship with LogitiVIEW; todays' leader in warehouse vision solutions.

Over the last couple years, LogistiVIEW's main stakeholder has shifted from the innovation team asking, "Does this technology actually work?" to the Operations and Engineering teams asking, "How will it be a difference maker in my operation?". We are seeing Vision technology scaling inside warehouses. The technology has been around for nearly 10 years (and even LogistiVIEW is almost 8 years old) but has faced a long adoption curve due to lack of maturity. The reason for recent growth is simple: Vision is finally enterprise ready. Any new technology must reach the place where it is stable enough, robust enough, and secure enough to be used all day long in a complex operation and our customers are able to do that with LogistiVIEW and smart glasses from our hardware partners.

Seth Patin, CEO LogistiVIEW

