



Vuzix and Aptus Team Up to Disrupt the Supply Chain Industry

In the era of online ordering, the burden on the supply chain is getting heavier. Rising shipping costs and increased restrictions on imports/exports are making errors throughout the chain more expensive than ever. Many shipping and logistics companies are tasked with finding better, smarter, and faster ways of operating to meet demand and mitigate costs. Supply chain operators are always looking for ways to upgrade their processes by increasing speed and flexibility while still maintaining stability. Augmented Reality (AR) is not only flexible but also a cheaper alternative to traditional automation methods, and has been proven to reduce costly errors. *Aptus ExpertVision* is a disruptive technology offering the warehousing and

logistics industry a pick-by-vision solution to maximize their supply chain efforts using Vuzix smart glasses.

Why Pick-by-Vision

"Humans are most comfortable using sight out of all five senses," said Gurumurthi Shankar, Chief Commercial Officer at Global Shipping and Logistics (GSL). "This is largely why vision, paired with minimal voice commands, makes this an easy application to use and an overall easy technology to adopt." In addition to the ease-of-use, the Vuzix M400 smart glasses used by the team adds the ability to record events as they happen along the supply chain, when needed, to be later referenced for a variety of reasons, serving yet another benefit to the overall operation.

"This technology frees both the hands of the operator and makes the human job easier overall. This is not science fiction. This is real. This technology gives us extra speed to serve more customers without compromising on quality or accuracy."

Gurumurthi Shankar
CHIEF COMMERCIAL OFFICER AT GSL

Vuzix M400

GSL opted to use Vuzix smart glasses because they combine Artificial Intelligence (AI), Augmented Reality (AR) and Machine Vision to provide real-time visual and audio references, and decision-making support for the employees on the floor.

These functions, and the depth and scope of information that can be included, have made Vuzix smart glasses an indispensable operations tool. Comfortable for all day wear, the glasses are easy to operate, allow users to work with both hands while correctly completing tasks, and deliver real-time information and communication. They also provide a dynamic endpoint connection for GSL's Warehouse Management Systems (WMS) solution, enabling them to access and manage inventory, shipping and receiving, and other business functions on the fly.

Manhattan SCALE

Manhattan SCALE, GSL's warehouse management system developed by Aptus, provides them with the features, functionality, and technology needed to solve supply chain execution challenges, accessible directly through the smart glasses interface. It provides sophisticated logistic capabilities and rapid deployments using a highly configurable environment and easy-to-use inputs. SCALE capabilities include inventory management, picking slot replenishment, distribution optimization, order planning, labor management and forecasting, slotting optimization, billing management, and Radio-Frequency Identification Device (RFID) Management – which in most cases are accessible by employees wearing Vuzix smart glasses. This access provides new levels of efficiency and coordination by opening up moment of need access to business systems.



APTUS



Aptus ExpertVision/GSL Dubai

GSL partnered with Aptus to develop the pick-by-vision technology, combining voice with vision to great success. As a direct result of implementing the technology, GSL saw previously unheard-of performance enhancements in areas of receiving, put away, and picking.

- 15% performance increase related to receiving, decreasing the average depalletization time by 4 minutes.
- 24% performance increase for put away activity, decreasing average slotting time by 22 minutes.
- 20% performance increase in picking, decreasing average order processing time by 16 minutes.

The Benefit

ExpertVision is relying completely on the existing Manhattan SCALE scanner flows – using all the logic and complex configurations available by the software. When new picking flows are inputted into the Manhattan SCALE system, they are automatically pushed and available in the application on the glasses. This enables increased distribution flexibility to meet client needs without compromising picking productivity. Additionally, the ergonomic wearable form factor from Vuzix that enables wearers to focus on complex tasks, and user-experience functions that enhance quick knowledge capture, helps warehouse operators improve expediting systems, and moves employees through their tasks in a faster, more efficient manner.