The future of robotics in a post-pandemic world

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Few in the world today have not been impacted by the global COVID-19 pandemic. How can retailers and 3PLs take control of this dynamic environment, to efficiently and cost-effectively manage a growing business, while staying ahead of their competitors? The answer is: innovation through new automation technology.

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One key innovation that is disrupting the industry is robotics. Initially, when labour was plentiful, the introduction of robotics was viewed with skepticism to all but the most enlightened. Today, labour is now difficult to attract and retain, and the work itself is hard. Robotic automation is now an accepted (and expected) part of factories and warehouses. Their ability to reliably perform basic, repetitive functions has improved productivity with less labour while also improving the overall workplace quality and safety for the worker.

The Autonomous Mobile Robot (AMR), an innovative and proven type of automation, offers many advantages to boosting productivity in a warehouse. The robots are fully autonomous, safely operating alongside and collaborating with workers to maximise productivity. Deployed as a multi-bot fleet, AMRs like the LocusBot, mean that more work can get done at a faster pace without adding more labour or disrupting existing operations.

Health safety
The key to how AMRs increase productivity comes from how they collaborate with a worker. With multibot AMRs, workers do not simply follow an automated cart. Instead, workers focus on picking in a specific ‘pick zone’. This effectively eliminates wasted and unproductive walking time. With AMRs, workers walk 50% less

per day and productivity is instantly increased 2X while cycle times are lowered.

One unexpected benefit resulting from the COVID-19 pandemic is how AMRs help with health safety. With social distancing required within the warehouse, warehouse personnel are challenged to maximise productivity while still minimising one-to-one contact. Using AMRs, workers can work even more efficiently while naturally minimising human contact. Worker interaction is limited mostly the worker and the robot. Now, the only time the workers need to interact is during breaks or at the start and finish of a shift. And, robots can be easily and safely sanitised, further reducing any risk of exposure.

Fast deployment
The value of the multi-bot AMR solution vs. cart based systems has become increasingly clearer as the new normal is established. With more people shopping online, AMRs allow operators to easily scale to seamlessly manage volume surges, spikes and seasonality. This makes managing labour and controlling costs significantly easier.

The Locus AMR solution was designed for easy setup and fast deployment in a cloud-based operation, meaning most phases of deployment and operation can be completed remotely. This is ideal for today's current quarantine or restricted-access scenarios. Warehouses can deploy this AMR solution in a little as four weeks, enabling them to react quickly – and stay ahead.

While success in the new normal is difficult to quantify, the early adopters of AMR technology have already seen massive gains in terms of productivity and many are growing and expanding their AMR operations. Those who delay deployment decisions risk getting left behind, losing competitive advantage, or worse. Such is the rate of change in the technology. To be successful in today's dynamic e-commerce and order fulfillment environment, those who embrace – and deploy – robotics automation will be best positioned for future success.