

Robots as a service simplifies the automation of sorting operations

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Offering products as a service allows users to test new technologies with reduced risks. This is good news for warehouse sorting operations in the parcels, ecommerce and fulfilment sector, where operators can struggle to justify replacing traditional manual processes with robots. To facilitate this changeover, Prime Vision is now offering robotic sorting as a service (RSaaS), allowing its customers to effortlessly implement this highly flexible solution.

Robots have revolutionised repetitive processes, delivering greater efficiency, accuracy and speed in a multitude of applications. This is especially true in sortation operations within e-commerce fulfilment centres and large-scale parcel hubs, where workers traditionally sort parcels into roll cages and pallets based on their destination. However, doing this manually is slow, strenuous and error prone. Fortunately, robots are changing this. With advanced navigation systems and advanced software, robots can efficiently move parcels to and from any sorting destination within a predefined area, optimising throughput and reducing reliance on manual labour.

Reservations about robots

Despite the clear operational benefits of robots – there are barriers to entry. First is attitude. To many, robots are still a solution of the future rather than today, so some operators can be sceptical about replacing a familiar manual process with something they consider experimental.

Next is upfront cost. Buying even a small fleet of robots can involve CAPEX that may not be supported by the budget, giving operators another reason not to automate.

Then there is hassle. To run a fleet of robots, businesses require system design, implementation experts and ongoing maintenance support - all of which can place increased strain on the team and raise operating expenditure (OPEX).

An established technology

Prime Vision is overcoming reservations regarding robotic sorting by providing a proven solution in a flexible service package.

Operating a fleet of over a thousand robots running at the world's largest postal operators, Prime Vision has standardised this once experimental technology. Standing 1 m high with an 80 x 60 cm loading surface for parcels, each robot can carry small and large packages weighing over 30 kg. Fleets can number from a few robots to over 70, with the ability to move up to 3000 to 4000 parcels per hour. Consequently, Prime Vision robots are suitable for most sorting processes.

This is because robots, equipped with information from the warehouse management system, can drive to any destination within a mapped area, eliminating staged sorting processes and maximising efficiency. Scalability is built in as operators can easily add or remove sorting destinations, allowing straightforward system optimisation to meet different levels of demand.

LIDAR and an overarching fleet management system ensure safe routing and functionality. With the robots able to detect and avoid obstacles, people can safely enter the area of operation, creating a hybrid space. A shutdown button for the system is also provided.

Considering this install-base, versatility and safety, operators of Prime Vision robots have the assurance of using a proven technology.

Pay for what you need

Even if attitudes are favourable towards robots, the CAPEX involved in deploying such a solution can be beyond existing budgets. The solution to this is a RSaaS model. Rather than buying hardware, Prime Vision offers its customers a holistic service package that operates on a pay-per-capacity model.

Prime Vision experts will assess the sorting requirements and design a tailored system that integrates with the existing software and hardware infrastructure of each customer. The team will then implement and deploy the system, carrying out continuous analysis and scaling it up and down as per demand. This model gives operators the chance to try the system and experience the benefits of a right-sized solution without breaking their budget. By paying to capacity, customers only spend on what they are using, ensuring exceptional cost-efficiency.

Minimising hassle and environmental impact

RSaaS also takes the strain off customer operations teams. The package offered by Prime Vision includes a comprehensive robotic sorting-as-a-service solution, combining cutting-edge technology with seamless integration and ongoing support. From deployment to maintenance, Prime Vision's service ensures efficient, scalable, and hassle-free automation for sorting operations. This eliminates all the complexities and additional costs associated with ownership. More than that, the continuous management of the system by Prime Vision means total optimisation with no surplus hardware or resource, reducing OPEX.

This supplier responsibility for the continuous management and optimisation of the robotic sorting system is a benefit in terms of sustainability too. Applying its know-how, Prime Vision can achieve customer aims regarding throughput with the least possible investment of resources. As a service provider, Prime Vision also focuses on maximising the longevity of hardware, carrying out repairs and rejuvenating existing assets when safe to do so. Both contribute to a lower carbon footprint than

a traditional ownership model, with the technology expert helping to reduce waste, emissions and resource utilisation.

Subscribing to robots

With the rise of any new technology, there is hesitancy regarding adoption, especially when the transition is from a familiar manual process to a fully automated solution. However, the emergence of RSaaS shows how established robotics has become in complex sorting operations. The fact is that fleets of robots are already streamlining sorting operations within e-commerce fulfilment and parcel sorting centres, reliably moving thousands of items per hour at warehouses around the world.

As attitudes change, it's about offering cost-efficient options for businesses to trial robotics in their real-world environments. The highly optimised subscription model of RSaaS from Prime Vision provides exactly this, removing the CAPEX and OPEX of managing a fleet of robots thanks to supplier responsibility for all aspects of the system. Customers only pay for the capacity they need, while accessing a well-supported, highly proficient system that has a big impact on accuracy and productivity. For the parcel and e-commerce fulfilment sectors, robotic sorting is now only one subscription away.

More from Prime Vision: <https://primevision.com/robots-as-a-service-simplifies-the-automation-of-sorting-operations/>

Image captions:

Image 1: Prime Vision is overcoming reservations regarding robotic sorting by providing a proven solution in a flexible service package.

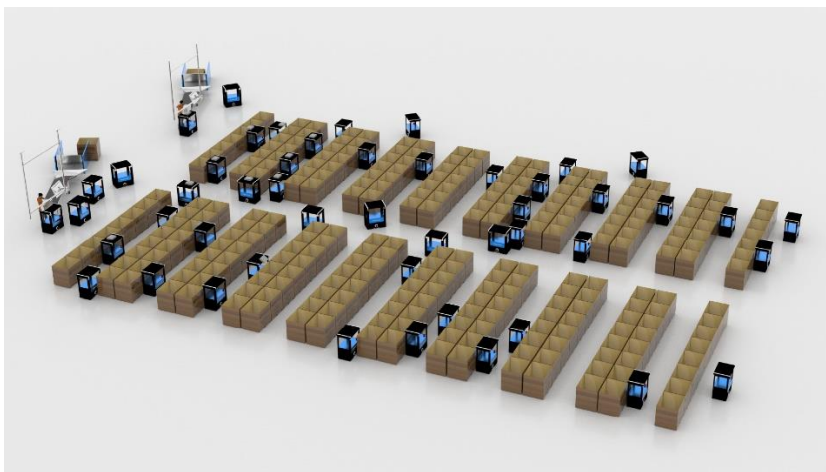


Image 2: Prime Vision experts will assess the sorting requirements and design a tailored system that integrates with the existing software and hardware infrastructure of each customer.

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About Prime Vision

Prime Vision is a global leader in computer vision integration and robotics for logistics and e-commerce. As an award-winning company, Prime Vision designs and integrates solutions using the latest recognition, identification, and robotics techniques to optimize the automation of sorting processes.

Headquartered in Delft, The Netherlands, more than 170 experts provide comprehensive market and domain knowledge to digital companies around the world.

For more information, visit <https://primevision.com/>

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