

Flexible sorting technologies take parcels in new redirections

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E-commerce, postal and parcel companies can always rely on one thing: end customers will always want more flexibility. With fierce competition to reduce delivery times, companies are now fighting to cost-effectively accommodate last-minute changes to addresses or drop-off times. By focusing on software innovation, Prime Vision is helping businesses extract maximum responsiveness and flexibility from their existing sorting equipment – ideal for quickly and efficiently redirecting parcels.

Diego Valdivia, Product Manager at Prime Vision, explores parcel redirects and how new technology is handling them.

Accommodating change

Sometimes, life gets in the way of parcel deliveries. Consequently, more companies are offering redirect options to customers to accommodate this. Consumer demand for flexible delivery is backed up by the numbers. Recently, DHL eCommerce UK reported that 35% of shipments were redirected in transit, while 10% were on the day of delivery.¹ In Germany, it was found that around a fifth of parcel customers

¹ [Parcel redirections highlight demand for flexibility, DHL reveals – parcel and postal technology international](#)

made use of redirect options.² With sorting centres processing hundreds of thousands of packages a day, this is a large quantity to manage, especially during peak periods. Failure to do so invariably results in late, inaccurate deliveries and unhappy customers.

The key to an effective redirect is to ensure it occurs before the parcel leaves the sorting centre, as having to change the delivery contract once the order has entered the last mile can be five to six times more expensive. Using the delivery fleet to carry around packages that won't be dropped off is not cost-effective. Even if this scenario is avoided, redirecting a parcel inside the sorting centre is no easy task either.

Sorting out a new direction

Two things are key to a redirect: a general sorting plan for the package and a way to route it to the new location. Until now, this has been a localised process. Parcels need to be sent to a specific sorting centre that can make on-the-fly changes to an up-to-date plan. The problem is that these changes are often done manually, sometimes using massive Excel spreadsheets that only certain personnel can make sense of.

This takes time, preventing a prompt reaction to the redirect request and increasing the likelihood of a problem. Hopefully, once the process is complete, the parcel is still in a cage at the sorting centre, but the package still needs to be found and moved elsewhere. A new address label will be needed, which involves sending the parcel to another area of the sorting centre for reprinting. With the volumes involved, this is an almost impossible task, and even if achieved, it is expensive and time-consuming. In the worst case, the parcel is already out for delivery and is incurring significant operational costs. Clearly, a localised, decentralised, manual process is not an optimal way to redirect parcels.

² [Valid data for first time on parcel transit times and domestic parcel delivery speeds - Bundesnetzagentur](#)

Addressing the complexities of redirects

Prime Vision's software innovation eliminates these complexities, centralises planning logic, and automates redirection requests using existing sorting infrastructure. The resulting millisecond response times and 'hands-off' approach to processing these packages saves time, hassle and cost.

Centralising redirects is handled by the Smart Data Manager, a platform that holds all plans, rules, and scenarios set by a small team of experts. Now, changes in the delivery contract needn't be handled locally through cumbersome spreadsheets. Instead, everything is centrally managed. Having access to the data in one place, postal companies can pursue further optimization through new AI techniques.

If the Smart Data Manager is the brains, the Smart Sorting Platform is the brawn. Having received planning and package information, the sorting platform tells machines or robots to move the parcel to the correct destination, a process that usually takes place in under 100 milliseconds. This fast, automatic reaction lowers the risk of a redirected parcel ending up in the wrong cage or van.

Changes to address and delivery time are handled like adding a new parcel. With the inherent speed of the system, amendments can be easily made in the window between the centre receiving information on the direction, promised delivery time and physical characteristics of the parcel (the "preannouncement") and the sorting process itself. Completing changes within this timeframe helps operators optimise the last mile, with parcels automatically assigned to routes, drivers and riders in the most efficient manner.

Old equipment, new tricks

Prime Vision's solutions are vendor-agnostic and can work with any existing sorting infrastructure. This includes sorting machines from brands such as Körber, Beumer, Crisplant and Vanderlande - or robots. By ring-fencing all logic in software, the

system enhances the flexibility of equipment so sorting centres can squeeze more out of their machines without big investments in hardware.

It also promises a paradigm shift in system hosting. Until very recently, e-commerce, postal and parcel companies relied on locally hosted platforms to reduce latency and enable faster sorts. However, the centralised, cloud-hosted architecture of Prime Vision's Smart Sorting Platform offers incredibly fast reaction times, giving sorting centres the option to reduce on-site hardware and reliance on localised hosting. Transitioning to this architecture adds even more flexibility to warehouse operations.

A flexible future

Effectively handling redirected parcels is critical for customer satisfaction and success in a competitive market. Having to redirect a parcel already in transit or in a cage is exceptionally costly and time-consuming, so preventing this from happening during the sorting process is a real advantage.

Prime Vision's system achieves this while eliminating slow, laborious centralising, and localised redirection processes, centralising all changes to the delivery contract so operators can take a more automated, strategic approach. This ensures that what could be a problematic process is pre-planned, highly responsive, and extremely accurate.

Ultimately, new technologies are what enable more flexible delivery services. This is not just a story of meeting customer preferences, but how e-commerce, postal and parcel companies can now add flexibility into their sorting infrastructure to maximise efficiency and profitability. Whether that is applying AI to operations, streamlining how the delivery fleet is utilised, or moving packages to new destinations at the very last minute – it's not just the parcels that are going in a new direction.

More from Prime Vision: <https://primevision.com/flexible-sorting-technologies-take-parcels-in-new-redirections/>

Image captions:

Image 1: The key to an effective redirect is to ensure it occurs before the parcel leaves the sorting centre, as having to change the delivery contract once the order has entered the last mile can be five to six times more expensive.



Image 2: Effectively handling redirected parcels is critical for customer satisfaction and success in a competitive market.
(shutterstock_216667807)

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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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