



CASE STUDY:

Ensuring fast, efficient order fulfilment by embracing innovation in the distribution centre



Using Smart Lockers, Ricoh Europe Supply Chain Management and DHL Supply Chain have increased their visibility and control over business-critical handheld scanners, cutting loss rates, improving device performance, and saving time.

COMPANY PROFILE

Headquartered in Bergen op Zoom in The Netherlands, Ricoh Europe Supply Chain Management (SCM) is responsible for sourcing, storing, and delivering products to customers across the EMEA region. In recent years, Ricoh Europe SCM has implemented many leading-edge technologies, such as robotics and automation, to improve process efficiency, minimise environmental impact, and reduce costs.

Part of the Deutsche Post DHL Group, DHL Supply Chain is the world's leading contract logistics provider. Operating in 55 countries worldwide, DHL Supply Chain provides transport, warehousing and logistics management to enterprises in many industries. Ricoh has partnered with DHL on multiple digitalisation and innovation projects over the course of the last 20 years.



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Pieter-Jelle van Dijk, Director Operations, Ricoh Europe SCM

CHALLENGE

The European Distribution Centre (EDC) in Bergen op Zoom, The Netherlands, functions as Ricoh Europe SCM's central hub for logistics and order fulfilment. To manage on-site operations, the company partners with service provider DHL Supply Chain, whose team leaders, shift managers, and warehouse operatives process incoming shipments and dispatch deliveries as quickly and efficiently as possible. In total, the EDC at Bergen Op Zoom stretches across 50,000 square metres, with 300 operatives working on site.

To support high-volume pick-and-pack and inventory management work, DHL employees rely on WiFi-connected handheld scanner terminals. Employees would collect the devices, use them during their shift, and then replace them in storage cabinets, which were locked overnight.

Although quick and simple, this process prevented effective asset management. For example, there was no way to monitor who was using which scanner, or whether devices were lost or damaged. Employees on the next shift could easily collect a faulty device and then lose valuable time hunting for spares. When issues were reported, shift managers raised support tickets by phone or email.

And once repaired, scanners were placed straight back into the cabinets, with no method to monitor them for persistent faults.

Pieter-Jelle van Dijk, Director Operations, Ricoh Europe SCM, explains: "As part of a move to streamline and optimise operations in the EDC, we decided to re-think the storage, distribution, and lifecycle management of our scanners. We saw that better governance and asset management, combined with a clearer picture of device usage, collections and returns, damage, and maintenance requirements, would ultimately contribute to more-efficient order fulfilment for our clients."

SOLUTION

For the new approach, Ricoh Europe SCM decided to replace the basic storage cabinets with a more-advanced, secure digital solution, with a controlled check-in and check-out process. After assessing possible solutions, the company decided to deploy six Ricoh Smart Locker cabinets, with integrated asset management software to track the scanners when in use, and to monitor their performance and reliability.

To implement the Smart Lockers, Ricoh Europe SCM formed a joint project team with representatives from Ricoh Service Advantage, the Ricoh Europe SCM IT helpdesk, and DHL



Supply Chain. In the initial phase, the team installed additional network connections and power supplies in the EDC, and assembled and configured the Smart Lockers and software. DHL also set up user accounts for employees and ran user training sessions. Following a successful proof-of-concept, the Ricoh Smart Lockers were ready for use in just a few weeks.

To collect a scanner, DHL employees now simply present their site access card to the Smart Locker and enter the number of a locker door. At the end of their shift, employees use a barcode reader on the Smart Locker to scan the device and confirm its return, and key in a status to record any performance issues, defects, or physical damage. As soon as a user reports a fault, the software automatically sends a message to the Ricoh Europe SCM ServiceNow system to raise a support ticket with the helpdesk.

The cloud-based software system records all scanner collections and returns, and tracks the condition of each device. Managers can pull instant reports into usage patterns, how many hours each device has been used for, and common scanner faults such as screen defects, loose handles, and poor connectivity. And whenever a scanner is not returned to the Ricoh Smart Locker within a predefined period, the software alerts the shift manager or team leader, who can follow up with the employee that collected the device.



With the Smart Lockers we can identify devices with recurring defects and those have been used for thousands of hours and carry a higher risk of developing faults. We can use this information to make smart, informed decisions on when to replace devices rather than spending time and money on repairs.

*Pieter-Jelle van Dijk
Director Operations
Ricoh Europe SCM*





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Simon Hooglugt, General Manager, DHL Supply Chain



BENEFITS

With the Smart Lockers, Ricoh Europe SCM and DHL have made significant improvements to their scanner storage, distribution, and management processes. Secure check-in and check-out steps mean that they now have full visibility into the current location and status of the business-critical devices, and can track and trace scanners in the EDC in real time. Full audit trails showing the last user of missing or overdue scanners enable Ricoh Europe SCM and DHL to minimize loss rates, and reduce the need to purchase replacement devices.

The data collected through the Smart Lockers also enables more effective scanner lifecycle management, as Pieter-Jelle van Dijk explains: "With the Smart Lockers, we can identify devices with recurring defects and those have been used for thousands of hours and carry a higher risk of developing faults. We can use this information to make smart, informed decisions on when to replace devices rather than spending time and money on repairs."

The introduction of Smart Lockers has also encouraged responsible working practices at the EDC. Ricoh Europe SCM believes that shop-floor employees are now more proactive about reporting defects, as they know that any unreported issues can quickly be traced back to the last user. In time, the company is confident improved processes will reduce maintenance workloads, and ensure scanners perform better for longer.

With the cloud-based system automatically reporting damaged scanners to ServiceNow, DHL team leaders and shift managers no longer spend time contacting the helpdesk to request support. Instead, they have more capacity to focus on value-add work, such as resource planning and supporting junior team members.

Simon Hooglugt, General Manager, DHL Supply Chain at the EDC site at Bergen Op Zoom concludes: "Using Ricoh Smart Lockers for asset management, we have found a solid and clean solution for our scanner storage. We can trace and securely store our scanners, saving valuable time and improving operational efficiency."

ABOUT RICOH

Ricoh is empowering digital workplaces using innovative technologies and services, thus enabling individuals to work smarter.

With cultivated knowledge and organisational capabilities nurtured over its 85 years' history, Ricoh is a leading provider of document management solutions, IT services, communications services, commercial and industrial printing, digital cameras, and industrial systems.

Headquartered in Tokyo, Ricoh Group has major operations throughout the world and its products and services now reach customers in approximately 200 countries and regions. In the financial year ended March 2021, Ricoh Group had worldwide sales of 1,682 billion yen (approx. 15.1 billion USD).