

FOR DECISION-MAKERS IN SUPPLY CHAIN

Supply Chain Effect

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VISIBILITY, CONTROL AND COLLABORATION IN SUPPLY CHAIN

Just connected or true collaboration?

Mattias Lindström, Zebra:

"We invest more in R&D than our competitors combined"

Climate-smart e-commerce distribution – How hard can it be?

"Commerce everywhere" places new demands on real-time visibility

Successful investment in RFID and smart video analysis

Nowaste Logistics' large logistics center on the Långeberga industrial area in Helsingborg, handles most of the vegetables and fruit consumed in Sweden. During 2022, Nowaste, one of the leading 3PL companies with specialist expertise in intensive goods handling, has developed a new efficient handling for its plastic pallets supported by RFID (radio-frequency identification) and smart video analysis.

– The starting point for our new, efficient handling of plastic pallets was when one of our largest customers in the grocery trade decided to receive their deliveries on plastic pallets replacing existing wooden pallets. We got the remit to ensure the necessary system integrations in our WMS and to adapt the physical warehouse technology for the new pallets, says Dragisa Jovanovic, project manager at Nowaste Logistics.

Dragisa explains that Nowaste Logistics is a technology-driven 3PL company with core competence in automation and IT. At the facility in Helsingborg, there is already an automated crane warehouse, AGVs and robotic picking, supported by in-house developed IT solutions. Technologies are utilized to create visibility and guarantee fast and efficient goods handling strengthening their customers' competitiveness.

From wooden to plastic pallets

The new plastic pallets are an improvement on the wooden pallets, and they have RFID chips built into the four corners. To further increase security and visibility, SiB Solutions' intelligent video analysis service was integrated into the warehouse operation.

– Sometimes technology doesn't work as it should. Mistakes occur and so on. We therefore felt that RFID in combination with the video solution would

give us the even higher security and clear proof needed to reassure the recipients that the right number of pallets, with the right goods, is sent to the correct recipient, explains Dragisa.

Nowaste Logistics already has good experiences with SiB Solutions, as both companies have previously started successful collaborations at a couple of Nowaste Logistics' other warehouse facilities.

"Belt and braces"

– A lot can happen even though we have an RFID solution. With video analysis, we get both belt and braces, because we can easily search, see and determine with certainty what actually happened. Errors usually do not occur with us but further along the transport chain, where pallets can, for example, get stuck on a transport hub. With the new solution, we avoid a lot of manual checks and unnecessary discussions, says Dragisa.

To verify that the goods was shipped on a plastic pallet, an antenna on the forklifts read the RFID code in the pallet, which is then registered in Nowaste's WMS. With the intelligent video analysis service from SiB Solutions, each pallet is then filmed as it passes one of the 26 camera-equipped gates. It means that every plastic pallet leaving the facility is documented with a video clip linked with the information registered in the warehouse system.



Staffan Persson, co-founder of SiB Solutions.

The corresponding video clips are displayed by searching for pallet ID, order number or a similar identification.

Jointly developed business case

The new solution was tested from January 2022, and already in May, intelligent video analysis was implemented for the entire flow of plastic pallets. This means that approximately 90 percent of all pallets are documented with video. Already after a few months, the positive effects are clear.

– We jointly developed a business case where the expected savings were significant in the form of less administration, fewer broken or unapproved wooden pallets in combination with the waste of pallets being greatly reduced, says Staffan Persson who is one of SiB Solutions' three founders and an experienced logistics specialist.

In an age of ever larger and more complex logistics flows with high demands on quality and speed, the visibility and accuracy in the logistics processes are more important than ever.

– When the pallets flow through the gates, the truck driver enters something into the computer, the RFID readers in turn read something but then the customer might say something else. When this does not match, it is important to be able to quickly verify what actually happened, says Staffan and emphasizes that SiB Solutions' service is both cost-effective and reliable, and that it is more and more in demand as a complement to RFID and barcode reading.

"Indisputable evidence"

Dragisa thinks that RFID is a good and effective technology, but stresses that there is often a need for "evidence" about what happened. It is not enough to simply show in a transaction log that a pallet has been registered in the system.

– The same questions arise with RFID as with conventional label reading. With the video material, no one objects or needs to discuss, seeing is believing. We started by developing a connection between our

WMS and the RFID technology to be able to log everything in a good way, but eventually we saw that the video technology could give us the indisputable evidence that is often needed. Just getting a waybill stating that X has been delivered is not enough if the recipient has received Y, he says.

More video analysis is planned

Overall, the pallet handling project has been very successful, and Nowaste Logistics is already planning for future expansion of SiB Solutions' services.

– This project has turned out well and is making waves. For instance, the major grocery players are now showing a great interest in using video themselves in other parts of their supply chain. In our own operations, we plan to use RFID and video technology to also monitor the internal pallet flow in the facility. We are also thinking about using the technologies for our inbound flow of pallets. Now we and our system support are prepared for the implementation of RFID in other businesses as well, for example within fashion, home furnishings, building materials, says Dragisa.

ABOUT NOWASTE LOGISTICS

Nowaste Logistics has recently implemented RFID and intelligent video analysis in its picking environment at the warehouse in Långeberga in Helsingborg. The company has an in-house developed WMS and staffs its operations exclusively with its own staff.

Activity: Third-party logistics company specialized in intensive goods handling.

Core competence: Automation, IT, competent employees and a strong culture.

Number of employees: Approximately 700.

Total storage areas: 300,000 square meters, of which 22,500 are used for fruit and vegetables.