NORMA®

CLOSER TO THE STORE CLOSER TO THE CUSTOMER

OBJECTIVES

- Avoid dispatch errors
- Increase picking speed
- Improve staff productivity

SOLUTION

- ZetesMedea logistics execution

RESULTS

- Picking errors reduced by 60 %
- 15-20 % performance improvement
- Increased order flexibility enabling last-minute ordering
- Smarter distribution of picking orders and better use of carriers (90 % improvement)
- Simplified billing of freight charges

zetes

Greater efficiency with ZetesMedea

Food discounter Norma is using the ZetesMedea logistics execution solution to automate and improve a number of warehouse processes. These range from voice-operated, path-optimised picking to replenishment and freight billing processes. Results show increased delivery quality and order flexibility for stores plus greater efficiency across all Norma's warehouse processes. Following its successful introduction at all 13 warehouse sites, phase two is already in the pipeline.

Beyond voice picking

In the field of logistics, the dual objectives of quality and transparency are inseparable. The importance of this can be seen in the new overall logistics concept offered at food discounter, Norma. This was developed in 2011, working in collaboration with supply chain solutions provider Zetes. From the beginning it was clear that Norma's paper-based picking processes needed to be replaced by an electronic, voice-controlled process. In addition, Norma was looking for a supplier who could not only provide the voice system, but could offer a perfect-fit solution for the entire process. "Anyone can deliver a voice system today," says Matthias Lehmann, a branch manager at Norma. "It was the overall logistics concept offered by ZetesMedea that was most important for us. Zetes convinced us they had a solution that answered all our requirements perfectly." Using a combination of standard software and hardware, supplemented by a series of customised solution components, Zetes offered exactly what Norma was looking for. "Zetes did not just reproduce what we already had. They analysed our processes and advised us before changing them so we could optimise our business," adds Reinhard Gräffe, site manager at Rossau.

The central warehouse

The project was launched at Norma's Rossau site in Saxony during November 2011. The company's central warehouse is located halfway between Chemnitz and Dresden. From there, 100 stores in Saxony, Saxony-Anhalt, Thuringia and Brandenburg receive daily supplies. Since 1993, Norma has employed around 50 people in Rossau, mainly working as order pickers. The site runs around the clock, operating in three shifts for six days a week. 1,500 different stock items cover an area of approximately 16,000 square metres. Overall, the central warehouse offers approximately 20,000 pallet spaces, occupied by 10,000 Euro pallets and 10,000 load carriers in the half size, "Düsseldorf" format. 1,000 pallets, weighing a total of 500 tonnes are picked every day. Norma has secured long-term contracts with transport companies to manage transportation between Rossau and individual stores. Its switch from paper-based to continuous electronic orders was made without interrupting business as usual.

Transparency and control

At this warehouse, shipping information is prepared and controlled by the ZetesMedea logistics execution solution. The ZetesMedea server receives order data from Norma stores directly from its central ERP system and uses this to calculate picking lists on the basis of configurable parameters and defined reserve slots. „Our shipment area is now used to maximum efficiency. This is because queues for orders can be set up, which means we only prepare goods that will actually be loaded onto the lorry," explains Reinhard Gräffe.

"Thanks to Zetes Medea, pick error rates were reduced by 60 % and picking performance has improved by 15-20 %."

Reinhard Gräffe, site manager Rossau

A modular approach

ZetesMedea's modular structure helped resolve another of the project's challenges: "Each store is different, has different sizes and different framework conditions. We chose ZetesMedea because it was important for us to obtain a modular system and allow each warehouse to pick out what it needs", says Matthias Lehmann, branch manager.

ZetesMedea communicates directly with voice and forklift terminals and with printers. ZetesMedea also creates a template

1,000 pallets are picked every day

to be used for store deliveries each weekday, demonstrating how the software makes a distinction between day and night shifts. "With ZetesMedea, we have installed a tool which allows us to combine, prioritise and manage orders, thereby optimising the entire warehouse cost structure. Our central warehouse acts as a service provider for 100 stores and thanks to higher delivery quality, we have increased satisfaction levels amongst internal customers", says Matthias Lehmann.

ZetesMedea also ensures that picking and replenishment orders are sent directly to the right employee to restock picking areas. Around 300 orders which are divided into about 500 picking lists must be processed in Rossau every day. The ratio between number of orders and quantity of picking lists depends on the number of affected storage areas and order size. Delivery volume per store varies between one and 34 pallets.

Flexibility to react to changing market conditions

On the whole, Norma can now react much more flexibly to the current market situation: "With ZetesMedea, we have simply become better connected with the individual requirements of our stores. If the weather changes, we add more barbecue items. If a competitor lowers its prices, we can immediately follow suit. We did not have this level of flexibility before ZetesMedea. We can effortlessly enter promotional items into ZetesMedea and assign them a second storage space, so that they are delivered to the store daily along with fresh produce. Through improved warehouse management alone we can generate up to 30 per cent more stock turnaround in our stores", explains Reinhard Gräffe.

The ZetesMedea Management Console (picking control station) is a central component of ZetesMedea. A graphical user interface provides information about the workload of employees in various storage areas and the exact progress of their picking work. This gives the web-based solution location-independent access to all information. Strict authorisation procedures ensure that both responsible employees on site and at individual stores can obtain information about current order status.

Norma
Food discounter, Germany

The first NORMA stores were opened over four decades ago by the owners of the Georg Roth chain store, which was founded in 1921, in Fürth. Today, NORMA has a network of over 1,300 stores, which have expanded across Germany, France, the Czech Republic and Austria since the spring of 2005. All of these stores are managed and supplied by a total of 16 branches. NORMA's food range includes 800 active items and the store also sells everyday necessities and non-food goods which are changed each week.

Reschedule at any time

Smart distribution of picking orders

Picking lists are automatically created from the control station based on the site's configuration. The solution allows different automated actions and options to separate and combine picking orders. Depending on the storage area, storage area group, customers and number of packages, Zetes' software suggests ways to optimise the picking process. This helps the warehouse office by ensuring efficient workforce allocation. ZetesMedea distributes picking orders equally amongst employees, allowing for the possibility of manual intervention by warehouse managers as required. Scheduling is based on the current workload of each storage area plus actual work in progress.

The picking sequence is calculated according to clearly defined rules which means ZetesMedea ensures each pallet is packed and compacted as a single operation. "In the past, full pallets were first packed before being compacted with package items", recalls Reinhard Gräffe. Now packaged items are packed in one stage on the full pallets.

Last-minute rescheduling

It is even possible to conduct last-minute rescheduling and define new framework conditions when picking is underway. Having this flexibility was a top priority for Norma: "There are always last-minute changes to items and quantities ordered, so we need to respond flexibly and support our stores", says Reinhard Gräffe. As soon as a change occurs, new data is recorded in the ZetesMedea system and subsequently transferred to the ERP system. "In the past, we had to record these changes on paper, type out lists and then rebook them manually in the ERP system", recalls Matthias Lehmann. "Compared to our old system, the current system is more secure, completely error-free and saves a lot of time.

"Zetes' solution significantly reduces warehouse office workload."

Reinhard Gräffe, site manager Rossau

Direct impact on sales

In addition to improving internal warehouse processes, customers are also seeing the benefit. "Our stores are our customers and with ZetesMedea, we can give them the ability to submit accurate stock orders using live data. In the past this had to be estimated, which meant a lot of fresh goods in particular were wasted", according to Reinhard Gräffe. He adds, "the transparency offered by ZetesMedea has had a direct impact on sales."

Working for multiple clients simultaneously

Automatic order updates

Communication with the 30 pickers who work the different shifts at Rossau is also smoother. In the past, any changes to an order were submitted in person on paper. Now, employees automatically receive updated information about the items and qualities to be picked via their voice terminals. The benefit of this is especially noticeable in the cold storage areas. "Before using Zetes' solution, staff working in the cold storage had to manually correct delivery notes at 30 degrees below zero. With voice picking this is no longer necessary and frozen goods pick performance has improved by 50 per cent, with a massive reduction in errors", says branch manager Matthias Lehmann.

Voice-enabled replenishment

Replenishment processes have also been voice-enabled. As soon as the number of items in the picking area falls below a certain quantity, pickers are triggered to transfer affected product lines with a simple command. This is sent directly to an IND FTF 3475, a robust, truck mounted terminal installed on each of the three forklift trucks used within the replenishment or goods-in areas.

Full pallet & multiple customer picking

Zetes' solution also enables optimal usage of forklift trucks based at Rossau, which have been equipped with extra long forks. This allows up to three Euro pallets or six-Düsseldorf pallets to be moved, one behind the other. It also enables more efficient picking of whole pallets, because pickers do not have to return after one or two pallets. Extended forks also allow simultaneous picking of orders for multiple stores. This type of "serial multiple-customer picking" is controlled by ZetesMedea and the software calculates the exact point at which the respective forklift or carrier reaches its capacity limit, taking into account pallet size, product volume and weight. In this instance, the picker receives a command via his or her voice terminal to take prepared pallets to the loading area.

Simplified billing of freight charges

ZetesMedea assigns each carrier with a unique identification number. The picker takes the corresponding label with data about packed goods from one of the 10 printers in the loading area. Citizen CL-S700-printers with a wireless interface and label-dispensing device are also part of Zetes' solution and directly controlled by ZetesMedea. Norma selected the Citizen CL-S700 printer because it was easy to use, had a small footprint and offered the lowest cost of ownership in its class. Using a single label, Norma can trace the path taken by each picking pallet right into the store. The result has been a further increase in delivery quality. "Since installing the check digit system, not a single incorrect pallet has entered the delivery line," reports Reinhard Gräffe.

This precise information is used for pallet tracking and also to simplify the billing of logistics costs: "Norma does not have its own fleet, but calculates the cost of each consignment with carriers", explains Reinhard Gräffe. To automate this step, Zetes has created an interface between ZetesMedea and the bill of landing software used by Norma. The number, type and pick times of loaded pallets are now transferred in this way, forming the basis for secure freight billing. Further enhancing safety, the high availability IT system is protected at several levels against failure and based on an Oracle database. Should problems arise during processing, Norma has the support of Zetes' around-the-clock service team (24/7).

Rollout in two-week intervals

Designed to cut costs, development, construction and testing of Norma's new logistics concept was completed in 16 weeks. Its full impact was quickly measured at the pilot site and led to a significant increase in quality. "Pick error rates could be cut by a further 60 % with a 15 to 20 % performance improvement", says Reinhard Gräffe. "We wanted efficiency gains first and foremost and this has been achieved. Truck utilisation now exceeds 90 % in most cases and we are exploiting the potential offered by ZetesMedea to flexibly change shipping priorities and combine orders," says Reinhard Gräffe.

Lower costs and higher truck utilisation

After completing the pilot phase, rollout to the remaining 12 warehouse sites began in May 2011. "The speed with which Zetes introduced the new logistics solution at our premises was impressive," admits Matthias Lehmann. He adds, "after completing Rossau we converted each site in two-week intervals." Since December 2011, all of Norma's warehouses have been using the new solution and enhancements are already in the pipeline. The food discounter is planning to integrate truck loading and the ability to track shipments right up to the recipient into the solution. In addition to digital proof of delivery, managing the return of empties will also be automated.

About Zetes

Zetes transforms the way modern supply chains collaborate. Its process optimisation solutions for Packaging, Warehousing, Proof of Delivery, Direct Store Delivery and In-Store management, connected by a Track & Trace repository, enables organisations to achieve end-to-end product traceability, from manufacture right through to the household. Zetes plays an important role in helping these organisations to meet global traceability challenges such as serialisation, diversion, safety, regulatory compliance and anti-counterfeiting, by integrating the latest cloud based platforms with its state of the art ImageID, Voice Recognition, RFID, Coding and Mobile Computing technologies. The Zetes Group employs more than 1000 people across 16 countries in EMEA.

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