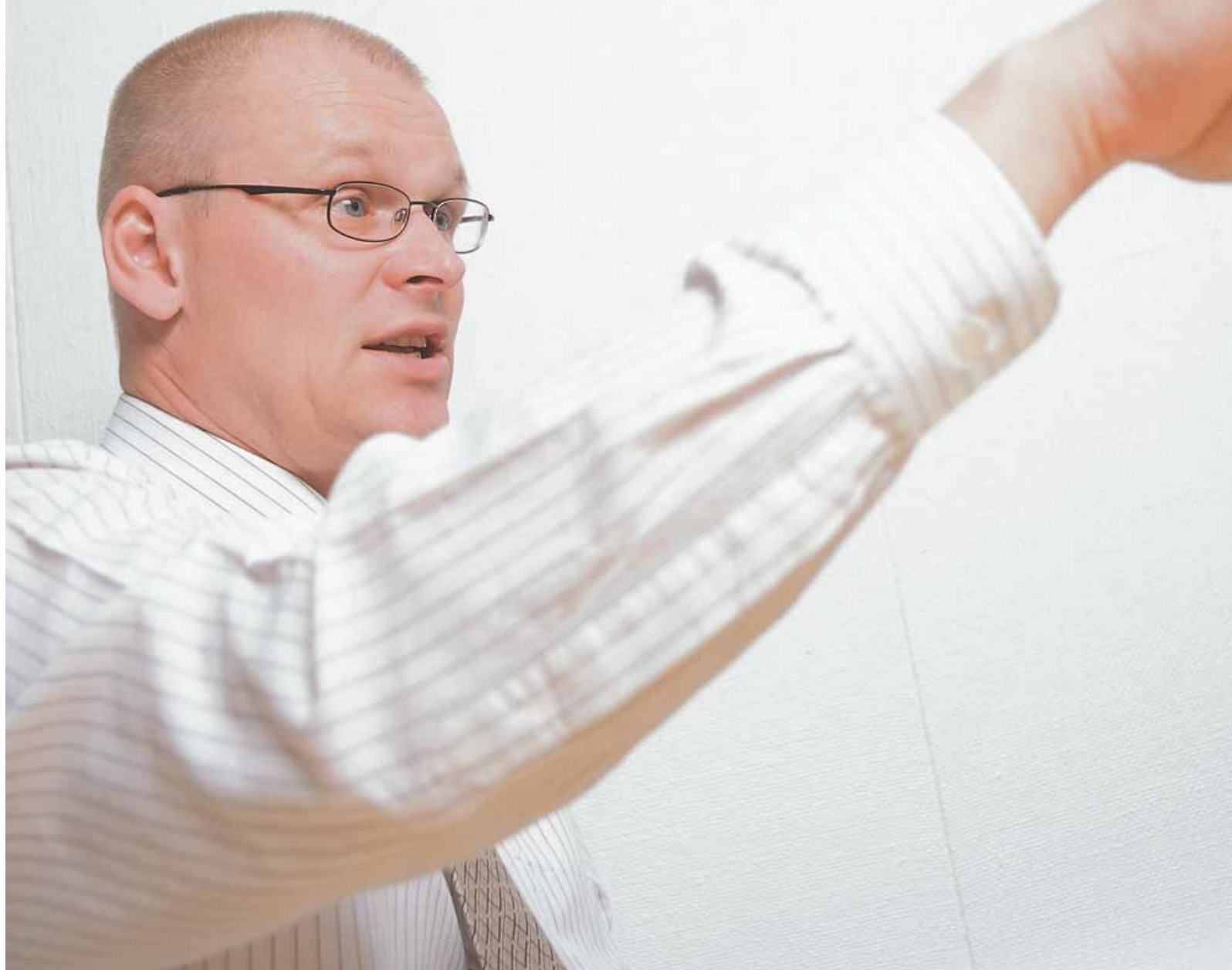


Valio believes in automated order picking



Blue and white Valio is part of the Finnish mindset in the same way as the romantic vision of milk churns shimmering at the side of a country lane. However, Valio is no prisoner of nostalgia – far from it.





As far as material handling is concerned, investments in the automation of order picking represent the future. In addition to competitive advantage and cost efficiency, investments are being made in order to find opportunities to streamline logistics co-operation across the whole supply chain, according to logistics director Thomas Backlund, who is in charge of Valio purchasing operations, distribution and warehousing operations as well as distribution co-operation.



Milk is still Valio's driving force, accounting for nearly 70 per cent of the products they supply. Handy inner trays facilitate the handling of yogurt cartons in the shop.

The Valio group comprises the parent company Valio Ltd and its subsidiaries in Russia, Estonia, Lithuania, Sweden, Belgium, Latvia and the United States. The group employs 4300 people, including 380 who work outside Finland.

Valio Ltd, the market leader in all key dairy products in Finland, invested over 30 million euros recently in brand-new packaging lines, conveyor units, machinery and buildings in its home market. The beginning of 2007 has been set as the target for the entire material handling development process, by which time Valio aims to have over 90 per cent of its 1240 products included in the automated order-picking system. By the end of next year, Valio will have reduced its warehousing facilities from six to three. After rightsizing, only the distribution warehouses at Jyväskylä, Oulu and Riihimäki will continue operating, in addition to the main warehouse at Pitäjänmäki, Helsinki, which serves the whole of Finland and concentrates on slow movers.

“In developing material handling, the aim is to be able to carry out promises made to the customer better than ever before. The important point here is that moving to automated order picking will improve delivery reliability consider-

ably. At the same time it will make order picking errors and the ensuing difficulties obsolete: the accuracy of automated picking is in a completely different class to what we have been used to with manual picking,” says Backlund.

Phasing-in process

The transition to automated order picking has meant a massive change in daily routines at Valio, since right up to the summer of 2004 all order picking was still being done by hand. Now order picking is done at Jyväskylä and Riihimäki by Cimcorp order picking robots – six in each warehouse.

The commissioning of the new system naturally required a long and thorough testing period, but the transition phase itself is actually quite short:

“The first delivery batches including robot-picked products were dispatched from Jyväskylä to customers at the beginning of June and manual picking of products covered by the automation system will end there in early autumn, and at Riihimäki about one month later.”

Automated order picking is now becoming ►



Developments in logistics have created excellent conditions for cooperation across the entire supply chain, to everyone's benefit, says Thomas Backlund.

Thomas Backlund gives Cimcorp top marks for co-operation: **Their reliability is really unparalleled and has been proved time and time again. Another crucial factor for us was the price.**

► an everyday occurrence at Valio. Orders arrive from the customer in electronic form and data from the orders goes directly to the automatic order picking control system. The form of the data is modified simultaneously, which enables the planning of even more efficient distribution routes. "At the moment over half of our products are in the system and the amount will grow as the development process goes on."

Blue and White

Automated order picking also requires the packing of products in sturdy units that are easily handled. At Valio the order picking system is based on a balanced division between white and blue plastic crates.

The classic dairy crate, a blue milk crate familiar to many Finnish consumers, is designed

for one-litre gable-top cartons. All liquids – for instance milks and juices – will continue to be packed in these crates at Valio.

The white crate on the other hand has been purposely developed at Valio for automated order picking. At the moment yogurts are packed in white crates, which in the future will also be used for various cheeses and other products.

"The idea is to minimize the use of cardboard boxes and pallets. Instead, full milk roll-in containers will remain in use, since there is no point in splitting such large deliveries into smaller amounts just for the pleasure of using robots."

Everything will benefit

Automation has also brought with it solutions for order picking of incomplete units. At Valio,

a handy tray has been developed especially for the white crate, which enables smaller clients to make more varied orders than earlier. At the same time, the tray will considerably reduce the amount of work done at the shop:

"For example, previously yogurts had to be put on the shop shelves by hand, but these new crates are ready to be put on sale as they are. The product can be neatly displayed in the shop faster than before."

Thomas Backlund, who moved to Valio from Tuko Logistics, stresses the fact that the wishes of the shops are being taken on board and also highlights the importance of cooperation when improving the efficiency of the entire supply chain:

"This has not been purely a matter of Valio's internal cost-effectiveness. Over half of logistics costs are still generated in the shops. If we create more problems for the next link in the chain than we save ourselves, then there is no sense in the whole process. Certainly, optimal solutions that take into account industrial warehousing and transportation efficiency, the availability of products in the shops and the circulation of capital can be found but only when there is open discussion and cooperation."

VALIO WAREHOUSES IN FIGURES (2003):

- Orders 5500 per day
- Order-picking lines 156 000 per day
- Inventory turnover 4.6 days
- Delivery accuracy 98.07%

VALIO DISTRIBUTION IN FIGURES (2003):

- Fleet 290 vehicles
- Deliveries 5500 per day
- Average delivery size 461 kg
- Deliveries 2 700 000 kg per day

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