→ 'FUTURE SHOPPING – NEXT GENERATION' FROM WANZL – the new scan tunnel recognises each individual product labelled with an RFID label in the basket of the Tango plastic shopping trolley. During numerous test applications, Dr Rainer Eckert, Technology/Development Manager at Wanzl (pictured), together with his team, proved the reliability and functionality of the scan tunnel.

OPTIMISATION OF

Security and IT at the checkout are becoming more and more important. The EHI experts explain why.

www: Which new developments for the checkout zone stand the best chance of finding their way into stores in the near future, particularly when it comes to their cost-efficiency and their effect on store processes?

EHI: Self-scanning should increasingly become the norm, particularly in food stores. Nowadays, thanks to petrol stations, check-in at the airport and ATMs at the bank, customers are prepared to manage on their own at the checkout too. Also, when paying we expect to be able to pay without the need for cash, straight from a card using Near Field Communication (NFC)*, for example via a mobile phone, making it even faster.

Theft of goods by customers costs the German retail industry around € 2 billion a year in inventory discrepancies, and it's a similar story outside Germany too. How will self-scanning and self-payment, combined with self-service checkouts, influence the level of these losses?

When it comes to developments in inventory losses, there have been differing experiences from the pilot tests conducted so far. No system is 100 % secure. Nevertheless, processes that feature monitoring possibilities (in some cases in conjunction with security tags) have been programmed to offer a high degree of security. This is because, as we all know, traditional checkouts do not allow us to detect all thefts and attempts at manipulation. Even checkout personnel are sometimes involved in the loss of money and goods through 'sweethearting' – giving free goods or discounts to friends or family. 'Self-service' solutions close some of these security gaps. However, at the same time of course, new possibilities for manipulation are developing.

Keen competition drives trade. Companies who understand customers, give them attention and satisfy their requirements, will come out on top. Will self-service solutions change shopping behaviour as well as customers' expectations and contribute to improved customer satisfaction?

First and foremost, these systems will be used by retailers as an additional service for customers. The customer can avoid the long queues at the normal checkouts, determine the speed of the checkout process and control the checkout procedure. Self-service solutions therefore offer the customer an alternative checkout. However, these systems are also being viewed as a possible answer to extended opening hours and the associated challenge, as they allow branches to stay open longer with reasonable costs and fewer personnel requirements.

How do you estimate the number of self-service solutions will develop over the coming years when compared to classic manned checkouts?

According to our research, the number of retailers who are getting to grips with these systems has seen a slight but steady increase over the past few years. According to the results of our current EHI study, 'IT Trends in Retailing 2009', more than a third of retailers surveyed view self-service checkout systems as an effective weapon against long queues. The number of retailers moving from theory to a practical application has also increased. At least 20 % of the companies surveyed exhibit active installations, and a further 16% want to trial self-service checkout systems in the next one to three years.

The EHI experts are available to answer any questions on the future of the checkout zone.

FRANK HORST,
Head of the EHI research division for inventory discrepancies and security

MARCO ATZBERGER,
Head of EHI contract research

CETIN ACAR,
EHI IT research division

↑ FOR PERFECT MERCHANDISE MANAGEMENT: 'intelligent shelving' from Wanzl, fitted with RFID read antennae, recognises in good time when RFID stock is low, so that it should never become 'out of stock'.

↑ THE NEW EGATE GENERATION OF SYSTEMS FROM WANZL is connected to the till via LAN and only opens once the correct payment has been received. In this way, the 'Future Shopping – Next Generation' system effectively protects against inventory discrepancies.

CHECKOUT ZONE

"A normal plastic 'Tango' shopping trolley, without any additional features, can be combined with the new RFID scan tunnel."

DR RAINER ECKERT, Technology/Development Manager

How will the high-income, free-spending older generation react to new developments such as self-scanning and self-payment? And where will the personal contact be when shopping in the future?

Have you read 'Checkout: A Life on the Tills' by Anna Sam? The personal contact between customer and checkout operator is nowadays not always the social pleasure it is often made out to be. As a result, many older people prefer self-service, where they can scan their products, check the prices, pack their shopping and take out their wallet at their own pace. By comparison, at a checkout you are often under pressure from the queue behind you and hectic checkout personnel to move your goods off the conveyor belt.

When it comes to 'Future Shopping – Next Generation' Wanzl solution, how do you rate its ability with intelligent shelving, and the RFID tunnel which can scan goods automatically in a plastic shopping trolley. Will it affect optimal merchandising and give more versatility in practice?

From a technical point of view, everything already looks very well-engineered. Being able to pinpoint at any time where and how many articles are at a given location could make a real contribution to stock optimisation. The checkout process is being simplified tremendously. The deciding factor is simply when will the prices for RFID chips fall low enough to enable them to be applied universally? However, because chip prices have fallen sharply over the past few years, the retail industry should now be shortlisting plastic shopping trolleys when considering new additions. **«**

* NFC: transfer standard for the contactless exchange of data

'Future Shopping – Next Generation'

Wanzl is now offering the checkout zone for reasonable prices: the new 'Future Shopping – Next Generation' solution combines cost-effectiveness with innovative security. The most important element of this is an RFID scan tunnel developed by Wanzl and placed directly in front of the checkout zone, through which the Tango plastic shopping trolley is pushed. This scan tunnel performs the automatic recognition of goods labelled with RFID labels – up to 200 products a second can be recognised at once. The result is IT-controlled, and sent via LAN to the till. Metal shopping trolleys cannot be used here due to their shielding effect. Thanks to the rapid fall in prices for RFID labels, the 'Future Shopping – Next Generation' system can already be used in retail today – without the need for high investment, but with numerous advantages e.g. the greatest possible security at the checkout, short queues at the tills and therefore high levels of customer satisfaction and retention, plus reduced personnel costs. A further important aspect is the microprocessor-controlled eGate – an exit system that is controlled directly from the till via LAN and will only open once the correct payment has been received. Shopping trolleys containing goods that have not been paid for that are pushed past the checkouts towards the store exit are therefore a thing of the past. Additionally, Wanzl's 'intelligent shelving' can also be connected – it is fitted with RFID technology that allows the IT system to calculate the current status of goods every time a product is picked up, put back or stocked. 'Out of stock' items are therefore consigned to the history books.

EHI Retail Institute

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