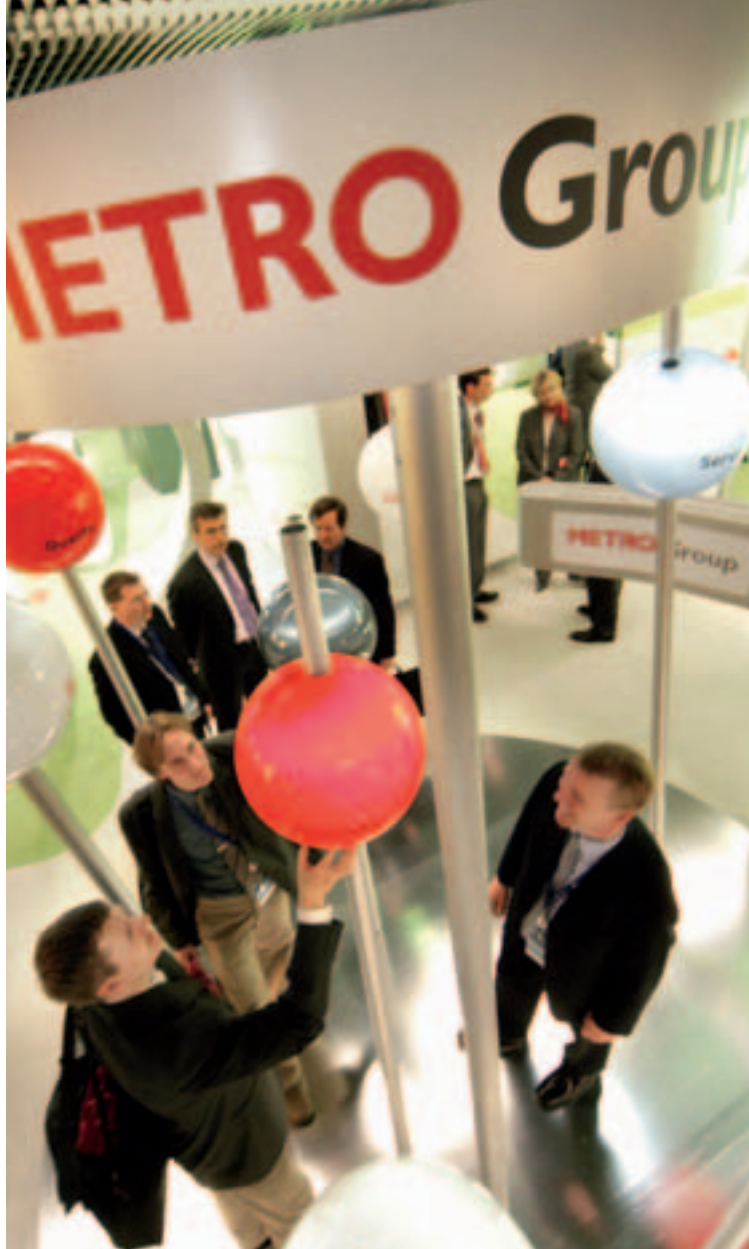


RFID



Dear readers,

Technological change makes a key contribution to an increase in productivity – more than e.g. capital investments. This is the result of a study by the U.S. Bureau of Labor Statistics. It confirms that we are on the right track with the introduction of Radio Frequency Identification. We have dared to take a step toward implementing an innovative idea in practice, because this is the only way for us and our partners to fully tap the potential of this technology: RFID will help us make retail processes more efficient and our customers' shopping experience even more convenient.



Meeting our customers' needs better, more quickly and more cost-effectively is also the core idea behind Efficient Consumer Response (ECR). With its annual conferences, the organization ECR Europe makes this concept available to all companies. Our title story summarizes the most important facts from this year's ECR convention in Paris. Key subjects included RFID and the Electronic Product Code (EPC). We also discussed the advantages of the EPC over the barcode with Jörg Pretzel, Managing Director of GS1 Germany. Learn more about this topic by reading our interview with him.

In addition, our background story introduces the new openID-Center of the Fraunhofer Institute for Material Flow and Logistics (IML). It is an example of how research institutions and companies can work together to further develop RFID technology.

We hope you enjoy your reading.

Yours,

Zygmunt Mierdorf
Member of the Management Board of METRO Group

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METRO Group
Future Store Initiative



JOINTLY CREATING ADDED VALUE

The 10th ECR Europe Conference in Paris has confirmed that ECR is far more than just a collaboration model. ECR is a culture that creates trust and brings industry and the retail sector closer together. RFID creates additional ties between the partners.

Between April 26 and 28, 2005, the 10th ECR Europe Conference took place at the Palais des Congrès in Paris. At the anniversary event, representatives from the retail sector, the manufacturing industry as well as IT companies and service providers attended to obtain information on the latest developments in the field of Efficient Consumer Response. The theme for this year's convention was "Better Consumer Value – Growing the Cake Together." The "cake" was meant to symbolize the retail sector's overall sales volume that has been shrinking for years.

The event was attended by more than 2,700 expert visitors. Pioneers in the implementation of the ECR philosophy presented their projects and success stories. In various discussion forums, top managers exchanged ideas and developed joint visions for the future. At the so-called Marketplace, the trade fair area of the ECR Europe Conference, a total of more than 50 companies showed their products and concepts. Here, the METRO Group was also represented, exhibiting its Future Store Initiative on an area of 1,650 square meters. Numerous partners of the initiative like IBM, SAP, Kraft Foods, Procter & Gamble and X3D Technologies presented innovative solutions that help to jointly design processes and practically implement ECR.

The central idea of ECR is to make the value chain more efficient based on the close collaboration between the retail sector and industry to better meet the customers' requests. Mastering this challenge is becoming increasingly difficult in view of the growing competitive pressure. "Only companies that fully tap the potential of international markets will be successful in the long term. As a result, collaborative processes play an increasingly important role in our

business," said Dr. Hans-Joachim Körber, CEO of METRO Group and Co-Chair of ECR Europe.

He emphasized the importance of the implementation of ECR and the commitment of the people involved in these processes. "We must become even more customer-oriented. To accomplish this, we must systematically implement ECR, so that out-of-stock situations are avoided," Dr. Körber said. He called the Electronic Product Code one of the most important innovations for the retail sector.

Grown partnerships

The joint introduction of the Electronic Product Code with the help of Radio Frequency Identification is also part of the long-standing, successful collaboration between Procter & Gamble and the METRO Group. Zygmunt Mierdorf, Member of the Management

Perfect makeup with the Smart Mirror



At the ECR Europe Conference in Paris, the METRO Group presented the Smart Mirror, an application that was developed in collaboration with the cosmetics company L'Oréal. Using the Smart Mirror, customers can determine the appropriate makeup. Via a touch screen, the user first selects a model that matches her type. Then she can choose from various cosmetic products for her eyes, lips and complexion. The screen will at once display the effect of a given lipstick or eye shadow. Once the customer has decided on a certain styling, she can transmit the selected products to an Electronic Shopping List and obtain a printout.



Left: The presentation of the METRO Group Future Store Initiative – a highlight in the exhibition area of the ECR Europe Conference.
Right: Zygmunt Mierdorf talks about the benefits of close collaboration with industry partners.

Board of METRO Group, and Dr. Stefan Scholl, General Manager for Global Customer Business Development, Procter & Gamble, presented the success story of this partnership. For more than 10 years, the two companies have jointly set up various ECR projects. Among others, the partners realized the exchange of electronic data, designed sales-promoting product ranges based on category management and made direct deliveries possible between a Procter & Gamble central warehouse and stores of the Real sales division.

Dr. Scholl described the benefits Procter & Gamble reaps from the close collaboration with the METRO Group: "For us, it is a revelation when the retail sector provides us with insight into its sales data so we learn more about the consumption habits of the customers. Based on this information, we build our marketing strategy, which is key for our sales." Their success proves that the

partners are on the right track. Based on the joint examination and optimization of the value chain, they succeeded in increasing the sales of Procter & Gamble products in the sales divisions of the METRO Group by 14 and 15 percent in 2003 and 2004 respectively – on average in all of the 29 countries in which the retailer had a presence (fiscal year 2003/2004).

RFID as a catalyst for ECR

Better merchandise availability for customers and, as a result, increased sales are additional arguments in favor of the use of RFID. While Procter & Gamble participated from the outset when the METRO Group started the introduction of the technology at the end of 2004, the partners conducted comprehensive tests beforehand. As part of a pilot project, Smart Shelves for the Pantene shampoo were set up at the Future Store in Rheinberg. The shelf

automatically checks its inventory and notifies an employee as soon as the number of shampoo bottles falls below the defined minimum quantity. This avoids out-of-stock situations, which still tops the agenda of the collaboration partners from retail sector and industry, as was confirmed at the ECR Europe Conference. "We also work hand in hand on this ECR project. We are both active in organizations such as EPCglobal and the Global Commerce Initiative to bring about standards and uniform processes. We jointly conduct tests at our METRO Group RFID Innovation Center, and we both invest in the technology, because we believe in it," said Mierdorf.

More sales based on ECR



The Co-Chairs of the ECR Europe Conference, Dr. Hans-Joachim Körber, CEO of METRO Group, and Anthony Ruys, Chairman of the Executive Board of Heineken, presented the results of the study "The Case of ECR." It was the first study to investigate how far the implementation of ECR has progressed since the first conference on a European scale 10 years ago. Since 1995, the ECR pioneers have succeeded with the help of ECR in saving EUR 18 billion or 3.6 percent measured by the consumer sales volume (based on 1995 prices). According to ECR Europe, another EUR 28 billion can be saved by reducing inventories and handling costs. "If all companies implement ECR correctly, retail sales could increase by EUR 42 billion across Europe," said Ruys. As a result, it is particularly important to both Co-Chairs of ECR Europe to forcefully advance the implementation.

First steps

What impact does RFID have on the processes within the company? How do the partners manage the data collected? What is the current status of standardization? These and other questions were addressed by the members of a panel discussion initiated by the GCI entitled "The Tag is on! RFID/EPC in Practice." The discussion was moderated by Dr. Gerd Wolfram, Managing Director of MGI METRO Group Information Technology, and Milan Turk, Director of Global Customer eCollaboration at Procter & Gamble, who jointly head the Electronic Product Code task force at the GCI. Claus Garbisch, Managing Director of DHL Logistics and Global Industry Director Consumer Products outlined the significance of RFID for the logistics industry: "Apart from our retail customers, more and more companies from the automotive and pharmaceutical industries work with the technology." In light of this situation, the worldwide standardization of the EPC is becoming increasingly important. In this context, Chris Adcock, President of EPCglobal, mentioned the new Class 1/Generation 2 standard and its international applicability.



Visitors of the ECR Europe Conference take a close look at the Smart Fridge from Liebherr.

All participants in this discussion round agreed that there is no generally applicable answer regarding the best starting point. Bill Gilmour, Managing Partner and Global Consumer Products Industry Practice Leader of IBM Business Consulting Services, said: "The large retailers have formulated their requirements. Those who wish to be among the preferred partners mustn't wait too long." Dr. Gerd Wolfram confirmed that the METRO Group will continue to advance the introduction of the technology together with its partners.

The industry has great expectations toward RFID with regard to traceability, merchandise security and merchandise availability. "RFID is no longer a vision but reality. This is also proven by the announcements of Tesco, Wal-Mart and the METRO Group. Now it's up to us to make the best of it," Dr. Körber said at the ECR Europe Conference. The participants of the convention feel a commitment to the ECR philosophy. RFID is a basic technology that helps them implement this idea during their everyday business activities.

One-year anniversary of the METRO Group RFID Innovation Center

In July of 2004, the METRO Group opened the RFID Innovation Center in Neuss. This information and development platform for partners from the retail sector, industry and technology made a key contribution to the successful introduction of RFID. In an area of 2,000 square meters, more than 40 facilities demonstrate how the technology can be integrated into retail processes, they now include

- an automatic RFID labeling system for pallets;
- a collection system for empty beverage containers that clearly identifies the inserted cans and bottles via Smart Chips;
- a telephone system based on which voice and data can be exchanged and accessed via the same network structure.

Suppliers, IT partners and representatives of the METRO Group sales divisions have the opportunity to familiarize themselves with the professional use of RFID in the areas of order picking, warehouse management, department store, supermarket and household use and test it under realistic conditions. In addition, consumer goods companies are provided with information on the quality of the transponders they use. Various testing procedures allow the testing of reading range, resonance frequency and encoding of data on the chip. Furthermore, the METRO Group RFID Innovation Center serves as a training and communication center for the employees of the sales divisions and for industry partners.



RFID COMPACT



>> RFID bracelet for patients

The Saarbrücken Clinic is testing the use of RFID to improve medical services. Patients wear a bracelet with an integrated RFID transponder on which a patient number is stored. The treating physician uses a portable PC or PDA to establish a wireless connection to the clinic's database to obtain insight into the patient's medical history. This way, the nursing staff can e.g. dispense pharmaceuticals more easily and safely. Encryption technology provides protection from unauthorized data access. The same system has already been used successfully for a while at the Jacobi Medical Center in New York City. Siemens Business Services, Intel and Fujitsu Siemens are the partners in this pilot project.

>> Non-cash payments on public transport

T-Systems has developed an electronic ticketing system that may replace conventional fare tickets on a nationwide scale in the future. The principle is simple: a customer card with RFID chip will supersede the tickets. Whenever passengers get on or off the bus or train, readers within the vehicles register the traveled distance automatically and without contact. This way, fares from different transport companies can be determined and billed in a standardized manner. In addition, the tickets are better protected against forgery.

>> The next generation of RFID chips

Royal Philips Electronics has developed a chip that meets the new EPCglobal standard for RFID transponders in the ultrahigh frequency range (UHF). According to the company, the "UCODE EPC G2" has better performance characteristics than previous solutions. For example, it works with the different UHF frequency bands that are used in the United States, Asia and Europe for RFID technology. This is a key advantage especially for those consumer goods manufacturers whose customers include international retailers. A large-scale launch is expected to begin in fall of this year.

>> Otto secures packages with RFID

Last year, Otto GmbH successfully tested RFID technology. At the Hamburg-based merchandise distribution center, the company tagged the packaging of high-quality goods such as mobile telephones with transponders. The result demonstrates the potential of the technology: savings realized during this pilot project were 20 percent above costs. In particular, security during transport was improved, since significantly

fewer merchandise shipments were lost en route to the customer. The Otto group intends to put RFID to practical use for this product category in the future.

>> Llama smugglers no longer stand a chance

Alpacas are a special llama species that originates in the South American Andes. Their wool is used to produce high-quality knitwear. Many Peruvian farmers make their living with alpacas, as do a large number of smugglers. To put a stop to the illegal trading activities with this desirable wool fiber, the national breeders' association has invested USD 5,000 to tag the animals with RFID transponders. This sum is small compared to the financial losses that would be caused by the smugglers. One alpaca alone is worth several thousand dollars. About three million alpacas currently live in Peru, and about 700 of them already wear an RFID chip behind the ear.

>> Europe and Asia on the same wavelength

Japan and South Korea have opened the 900 MHz frequency range for RFID applications. This marks another major step towards the worldwide applicability of EPCglobal standards. Experts were surprised by the quick decision and believe it is a strong sign for other Asian countries. In the European Union, RFID application is regulated by an EU directive. The member states of the EU are currently pushing the implementation of this directive. While Germany was the first EU member to grant UHF licenses for RFID technology at the end of 2004, France, Spain and Italy are still hesitant to follow suit. Industry representatives in these countries have already called for a faster implementation process.

"RFID IS A QUANTUM LEAP"

> A talk with Jörg Pretzel

GS1 Germany supports both the retail sector and industry in the introduction of RFID. In addition, the organization is responsible for the development and implementation of the EPCglobal standard. The overall service offering of EPCglobal is part of the portfolio of GS1 Germany. Jörg Pretzel, Managing Director of GS1 Germany and Chairman of GS1 Europe, talked to the editorial team of the RFID Newsletter about current projects.



Mr. Pretzel, in what respect does RFID technology perform better than the barcode?

First I'd like to defend the barcode. The fact that we succeeded in establishing it in more than 120 countries is a unique accomplishment. So far, there is hardly another standard that is represented on such a large scale: a large number of industries worldwide use the GS1 numbering system, and the system is particularly well established in the retail sector and the consumer goods industry. Nevertheless, RFID technology will perform a lot better in the future. It can tremendously accelerate logistic processes. Or think of the increase in merchandise availability: thanks to RFID, out-of-stock situations will occur much less frequently. The new technology will also bring about a quantum leap in terms of convenience for consumers ...

... and increase customer orientation. In what respect?

For example, the freshness of foodstuffs can be significantly optimized. If best-before dates are reached, the affected products can be identified in a timely manner and removed from the shelf. In addition, the use of RFID provides the opportunity to better inform consumers, e.g. about the contents of a product. This is particularly important for people with allergies or diabetes patients. Currently, GS1 Germany is planning a corresponding project in collaboration with health ministries, consumer protection associations and nutrition consultants such as Weight Watchers with the goal of developing a database that can be directly used at the store by consumers via information terminals.

But surely these advantages of RFID can only be fully leveraged if individual items are equipped with RFID?

That is correct. However, there are already some initial projects today in which RFID transponders are affixed to single items. I expect full application of the technology at the item level no earlier than 2010.

Which product groups are you referring to?

For example, GS1 Germany is currently running a project that tests to what extent RFID could be used at the item level in the field of textiles. Together with IT service providers, we are developing RFID transponders that can be used as part of a pool of reusable labels, which means that each tag can be reused. In addition, the new transponders will provide both product identification and theft protection. Today, these two functions still run separately: pants, sweaters and other textiles are identified via barcodes. However, for

theft protection, the retail sector uses the conventional acoustic-magnetic anti-theft systems.

Are there other current projects of GS1 Germany that are concerned with RFID?

Yes, certainly. We have taken up a series of subjects that are currently being developed further by task forces composed of representatives from the retail sector and industry. After all, GS1 Germany is the platform for manufacturers and retailers as well as IT and logistics service providers regarding the introduction of RFID and the EPC standard in Germany. An expert group of 25 companies collaborates with us, currently e.g. on subjects like an application identifier concept, RFID frequency, implementation of technological standards, process changes based on the use of RFID and best practices.

So far, companies have barely used RFID transponders on products. Is data privacy an issue for GS1 Germany nonetheless?

Of course. This is a very important issue, because consumer protection and data privacy advocates pay very close attention to how well we comply with the corresponding legal regulations. We maintain a close dialog with these interest groups. After all, the introduction of RFID is not about generating consumer profiles but about making merchandise flows transparent and traceable.

You were talking about the implementation of RFID technology. What is the status of this implementation?

Currently, about 550 companies worldwide are using the Electronic Product Code, 70 percent of them in the United States. Right now, Germany is the number two with regard to circulation. There are about 60 users who implement the technology as part of pilot projects or roll-outs in parts of their process chain. They are our customers, and we massively support them with resources and know-how. In comparison, about 30,000 retail and industrial companies are currently using the barcode. It is our long-term goal that all of these companies introduce and use RFID technology. As you can see, we have set ourselves an extremely ambitious objective.



YOU ASK, WE ANSWER

How can the partners of the METRO Group obtain information on the status of their deliveries?

In order to be able to deliver as needed and control supplies, it is helpful for the industry to have access to the inventory and logistics data of retail companies. In this respect, they receive support from the supplier portal NET.CONNECT, which serves as an information and communications platform to all partners of the METRO Group who are involved in the RFID roll-out. Via a password-protected area, the "Metro Link" application will provide current information to suppliers, e.g. on the following subjects:

- Incoming goods at the warehouse, store or outlet
- Outgoing goods from the warehouse
- Outstanding orders from warehouses, stores or outlets
- Damaged or perished goods at warehouses, stores or outlets
- Removal entry of the delivery from the system

What tests are conducted at the METRO Group RFID Innovation Center?

The quality and performance of transponders are key for the successful use of RFID technology. That's why the METRO Group affords all its partners access to the RFID Innovation Center: to realistically assess transponder characteristics, such as their reading rate and range of transmission, which are measured in a so-called GTEM cell (Gigahertz Transverse Electromagnetic Mode). GTEM cells isolate testing from interference of electromagnetic fields coming from mobile

phones or other devices. The device measures the so-called resonance frequency. This value indicates at which frequency a transponder reflects the antenna signal with maximum strength. A further test checks whether the data stored on the transponder were encoded without error.

How can suppliers guarantee an optimal reading rate?

The METRO Group recommends that partners build up their own expertise to ensure a smooth introduction of RFID technology. To accomplish this, partners can use e.g. the METRO Group RFID Innovation Center where they can obtain information on RFID and run practical tests using the technology. In addition, they should start tests at their own company by e.g. installing RFID readers at the outgoing goods portal: This lets industry partners check the transponders used on pallets on site and make adjustments to the technology accordingly. RFID tagging systems that automatically affix the transponder to the shrink wrap of the pallets help reduce errors in the placement of transponders.

RESEARCH FOR PROGRESS

> openID-Center opens its doors

A yellow forklift without a driver starts to move in one of the halls of the Fraunhofer Institute for Material Flow and Logistics (IML) in Dortmund. It is loaded with a pallet and independently finds its way from the incoming goods area to the storage space. An optical camera system controls the vehicle, while employees can determine the location of the forklift at any time based on the use of RFID transponders. Since the end of April 2005, visitors can observe and test this and other similar processes at the newly opened openID-Center.

The IML's "openID-Center" initiative supports technology providers and users in establishing a networked process chain based on RFID technology. It is the objective of the research center to provide a place for communication and knowledge transfer. Companies have the opportunity to test identification systems for their own logistics needs. This is especially important for small and

medium-sized companies, since they will be able to gather experience with RFID without incurring any financial risk. There is a great need for information and a correspondingly great interest in the openID-Center. "Our visitors are very excited," said Dr. Volker Lange of the IML, who heads the project. "They especially like the fact that we provide them with hands-on technology and that they can test more than just a few individual applications." After all, the processes along the logistics chain are increasingly networked and therefore pose new requirements for all parties involved.



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Real-time information

In the future, the flow of materials should be fully traceable at any time. Radio Frequency Identification will help realize this objective. At the openID-Center, the potential of the technology is investigated,



Follow-up: Dr. Martina Krogmann, Member of the Bundestag and Internet Officer of the CDU

In the discussion about RFID, the opportunities for the economy often recede into the background. How do you judge the course of the debate?

It is my impression that the emotionally charged debate of the past few months has calmed down. Both manufacturers and users have tackled the topic quite aggressively –

especially with regard to the impacts of RFID on consumers. The discussion has taken a technology-friendly direction, which is a fortunate development in my opinion. Otherwise we would run the risk of frivolously jeopardizing Germany's worldwide leadership position in the field of RFID.

What can the German government do to expand this leadership position?

We must understand new technologies primarily as an opportunity and not as a risk. The exaggerated and not very well-founded claims made in the public discussion create a feeling of unease among many people. Politicians can make a contribution to educating the public on RFID. Moreover, they must not obstruct the technological development through misguided consumer protection or data privacy legislation.

How can we benefit from RFID in our day-to-day lives?

When we go shopping, for example: I am already looking forward to having no more waiting lines at the check-out. In addition, forgery-proof RFID transponders on pharmaceuticals, spare parts and other high-quality products provide a guarantee that consumers purchase original products.

e.g. regarding traceability with the help of “smart” reusable transport packaging. Transponders provide logistics staff with precise information about the location of containers at a certain point in time. Especially companies such as those in the automotive industry that work with high-quality transport containers will benefit from this opportunity. The usage of reusable containers is optimized while at the same time costs are reduced.

Transponder with route planner

However, the Dortmund facility is not just about the real-time identification of merchandise. Another research project is concerned with autonomous, self-controlled objects. This means that packages, containers or pallets are able to independently find their way along the process chain, e.g. from the incoming to the outgoing goods area. The corresponding conveyor technology is available at the IML's demonstration hall, where reusable transport containers with writable transponders are used that carry information on the transport destination or a complete route description. If the cargo passes a switch, the involved conveyors exchange information and the merchandise adopts the course stipulated on the transponder. “This is a genuine revolution for us,” said Volker Lange. “In the past, companies centrally controlled gigantic logistics facilities,” he explained. “Once an error occurs, it often runs all the way through the system. This cannot happen with dynamic, decentralized facility control.” The data stored on the transponder allows continuous monitoring. As soon as the facility identifies an error, it issues a signal and the staff can intervene in a targeted fashion.

In the future, airports will be able to use the decentralized control to optimize their luggage management. Retail sector and industry will have the opportunity to react more quickly and more flexibly to customer requests. “However, there is no universal solution for everybody but the opportunities of RFID technology are diverse,” Lange said. As a result, the employees at the openID-Center develop an individualized approach for each interested company.

VOICES FROM THE INDUSTRY



Martin Vincenz

[Head of Marketing, X-ident technology GmbH]

X-ident technology became a partner of the METRO Group Future Store Initiative at the start of this year: what specifically is your participation?

As a so-called converter, i.e. a manufacturer of Smart Labels, we are perfectly familiar with the chemical and electronic properties of transponder labels. Especially UHF technology reacts very sensitively to exterior conditions, which includes the material surrounding the RFID transponder. Therefore we must take into account what is used with regard to paper, film, glue or application surface and match them optimally. Over the past three years, we have gathered experience with RFID technology in the United States. Now we can benefit from this experience and so will the METRO Group and its suppliers. Not only do we supply them with our products, but we also provide the industry partners and companies with our expertise during training seminars organized by the METRO Group.

In which industries do you see the greatest potential for RFID labels?

There is no doubt that the largest quantities of merchandise are moved by the retail sector. During the next few years, the retail sector will be primarily concerned with tagging pallets and secondary packaging with RFID transponders. Things will become even more interesting once the technology is also used at the product level. It remains to be seen how unit prices for transponders will develop.

You are a member of EPCglobal. What do you consider the greatest challenges with regard to standardization processes?

Within just a short period of time, EPCglobal must define standards for a complex technology that are accepted and can be practically integrated by all partners worldwide. But even if the interests of the parties involved are very diverse, everybody probably realizes that the retail sector can only fully tap the potential of RFID if it is based on internationally applicable standards. As a technology provider, we must implement these requirements in our products. In doing so, it is particularly important that we minimize the diversity of label types for various application environments.

TRADE FAIRS AND CONFERENCES

IIR Expert Conference on traceability in the food industry June 27 to 29, 2005 _ Duesseldorf

The practical implementation of traceability takes center stage during this three-day event of the Institute for International Research (IIR). Discussions will include currently applicable regulations as well as the use of different IT systems. Representatives from government agencies and companies will report on their work. A workshop on the subject of "How to conduct recalls quickly and safely" will be held on the last day of the expert conference.

IIR Germany
www.iir.de

RFID World Europe Conference June 28 to 30, 2005 _ Amsterdam

This convention and exhibition will address the latest developments of RFID technology in Europe. An introductory workshop will answer basic questions on RFID. International speakers such as Hein Gorter de Vries from GS1 Nederland or Ed Coyle from the U.S. Department of Defense will provide comprehensive insights into the practical work with the technology.

Terrapinn
www.terrapinn.com

6th ECR Day: More customer proximity, more success in the market September 6 and 7, 2005 _ Duesseldorf

The topic of this event is the application of Efficient Consumer Response (ECR) in various forms of distribution with a focus on strategies and practical experience. The METRO Group will present future-oriented technologies for the retail sector at the booth of the Future Store Initiative.

GS1 Germany
www.gs1-germany.de

PUBLIC DEBATE

Data privacy in focus

On April 21, 2005, Renate Künast, German Federal Minister of consumer protection, food and agriculture, issued an invitation for participation in a conference entitled "Consumer policies in the digital world. The transparent customer?" in Berlin. About 120 participants from politics, companies and trade associations discussed the impact of digital technologies on consumer protection. The discussion also addressed Radio Frequency Identification. Künast emphasized that the potential of the technology will be fully tapped but that freedom of choice and transparency for consumers must be ensured at all times. In this respect, the minister assigns responsibility primarily to the companies.



Politicians convinced of the benefits

On April 27, 2005, a group of Social Democrat members of the German parliament visited the Future Store in Rheinberg. On site, the politicians were provided with information on RFID technology and especially on the additional service functions that RFID offers to consumers. SPD consumer politician Manfred Zöllmer, who accompanied the group, advocated a consideration of the technology without reservations. On the other hand, compliance with data privacy must be ensured, he said. According to Zöllmer, RFID offers a considerable potential for businesses and a number of benefits for consumers in the medium term.

THERE ARE NO UNIVERSAL SOLUTIONS

> “Radio Frequency Identification: The gap between perceptions and reality,” a study by the Management Consultancies Association (MCA)

Over the past one-and-a-half years, companies’ interest in RFID has increased dramatically. More than half of the companies in Great Britain expect the technology to become an everyday part of the business world in just five years. Despite this assessment, so far only a few companies have begun in-depth exploration of the possibilities presented by RFID. For the time being, the majority is watching the activities of other companies, according to the results of a survey conducted by the London-based Management Consultancies Association (MCA) with more than 300 key executives from British companies. In addition, MCA interviewed experts involved in the corporate introduction of RFID.

Different needs

Predominantly larger companies run practical tests with RFID or integrate the technology into their work processes. The retail sector in particular has assumed a pioneering role. Depending on the industry in question, the companies have very different expectations toward the technology. For companies from the chemical or manufacturing industry, an improved flow of information and optimized quality control take center stage, while the pharmaceutical industry hopes that RFID will provide better counterfeit protection for drugs and improve safety for patients. Retail and technology companies, on the other hand, are relying on RFID to optimize merchandise availability. For pilot projects, the authors of the study recommend focusing on special applications during the initial phase.

Gathering their own experience

Overall, one-third of the survey population said they would wait for the results from companies that are already testing RFID. The authors of the study believe that such behavior involves two risks. Firstly, many companies do not consider the benefits they could reap especially from small, limited projects. For example, retail companies benefit from cost savings realized exclusively by the use of transponders at the pallet level. Secondly, the authors pointed out that possible difficulties in introducing



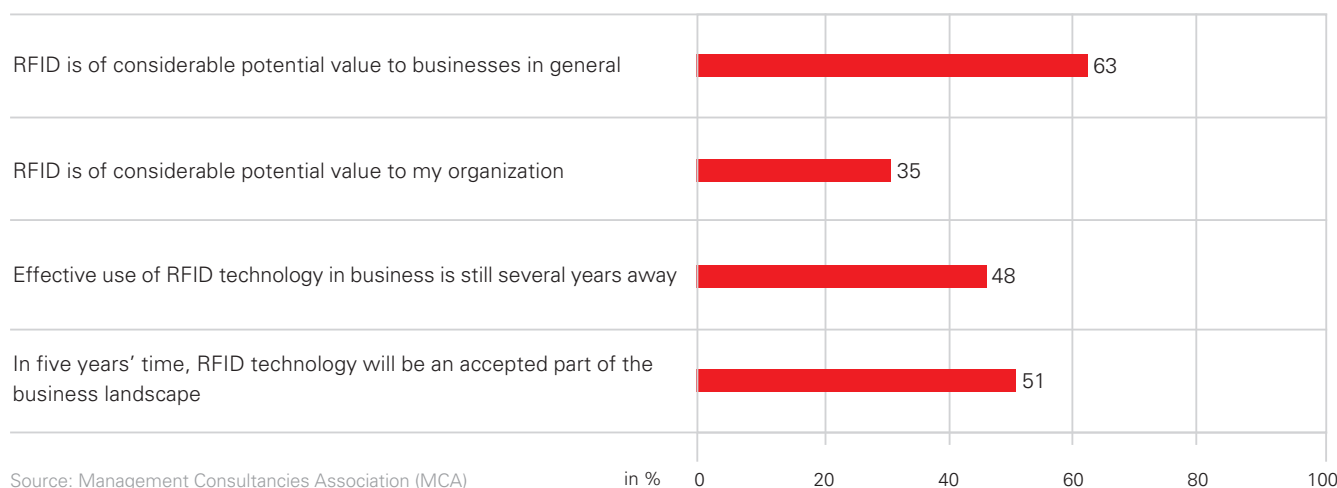
The study can be ordered at the following e-mail address: joy.hewgill@mca.org.uk

RFID technology vary from company to company and are therefore hard to predict. As a result, companies only have a limited opportunity to learn from the experience and errors of others.

According to the authors, many people underestimate the extent to which the introduction of RFID impacts internal work processes. MCA emphasized that it is particularly important to integrate the technology into a company’s processes. Another important aspect is the complexity of the overall system infrastructure. Appropriate software is required to select the collected data and forward them to the existing merchandise management systems. Companies will only be able to find applications that match their requirements, if they run practical tests with RFID in their own operation.

Overall attitudes to RFID

Percentage agreeing or strongly agreeing with the following statements (multiple answers possible):



Source: Management Consultancies Association (MCA)

READ MORE

> RFID - A Driving Force for Innovation

Technological progress is key for the competitiveness of Germany as an industrial location – and therefore also for new jobs and overall growth. In light of this situation, German chancellor Gerhard Schröder has prompted the “Partners for Innovation” initiative. IBM is a member of one of the 13 task forces, the so-called “Impetus Group for Services.” One of the technologies taking center stage is Radio Frequency Identification. The “Partners for Innovation” are convinced that RFID will revolutionize logistics over the next few years. Therefore, IBM and the METRO Group are jointly promoting the use of the technology. In the brochure at hand, they present detailed information on the opportunities, applications and potential of RFID with the goal of providing education and starting a dialog. The authors of the brochure also address issues of data privacy and IT security and report on the RFID roll-out at the METRO Group and the activities of the “Partners for Innovation” initiative.

The 60-page brochure “RFID – A Driving Force for Innovation” is available in both German and English and can be ordered from the METRO Group RFID Hotline.



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> RFID and Beyond - Growing Your Business Through Real World Awareness



Claus Heinrich

Wiley Publishing, Inc., Indianapolis

The quick procurement of information is becoming increasingly important for internationally active corporations. In his book, SAP Executive Board Member Dr. Claus Heinrich describes how RFID can help companies access process data anytime and anywhere. “Real world awareness” is his suggested solution, by which suppliers, customers and partners have access to all relevant information via a data network.

In the first part of the book, Claus Heinrich addresses the impacts of real-time technologies on the retail sector. According to Heinrich’s suggestion, the most important innovation is that all participating companies can communicate with each other based on the “awareness network,” thereby making their work processes more transparent. Following the theoretical basics, the author explains their practical application in the second part of the book. Examples describe the use of RFID at SAP and other companies such as Intel, Nokia, Wal-Mart or Procter & Gamble. Heinrich also conducted interviews with key executives to discuss the specific benefits of the technologies for their companies and their industry. Interview partners included Klaus Zumwinkel, Chief Executive Officer of Deutsche Post AG, and Zygmunt Mierdorf, Member of the Management Board of METRO Group.