

Radio Frequency Identification

Synchronize Your Business

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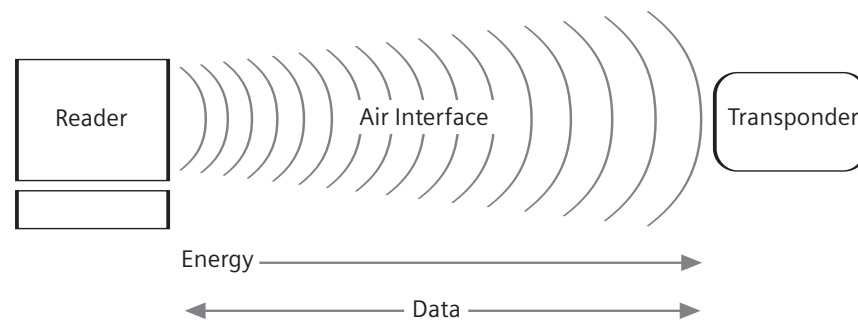
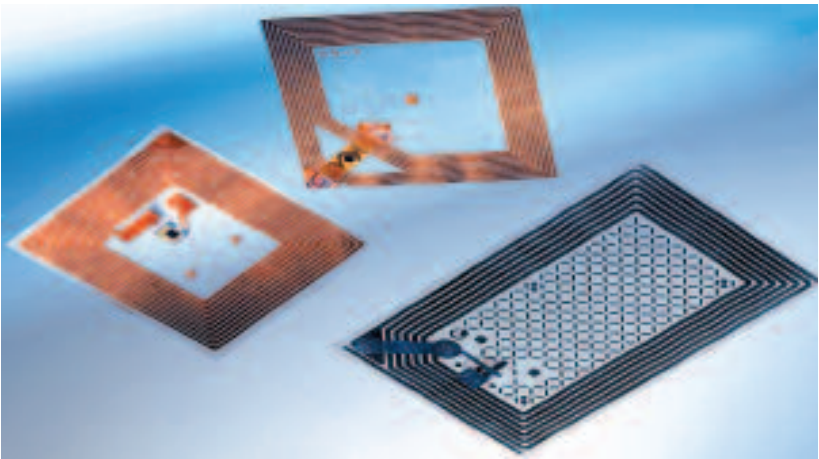
Meeting the Demand Economy

As globalization transforms industry dynamics across every sector, customers have more choice and more power than ever before. New technologies such as radio frequency identification are helping to synchronize supply chains and meet fluctuating demand in the search for renewed competitive advantage.

The global economy of the 21st century presents your business with unignorable challenges and opportunities. Faster product life cycles, accelerating competition, intensifying regulation, global labor pressures – take your pick, today's environment demands innovative business strategies and continuous operational excellence. Technology represents another unignorable challenge or opportunity, depending on your strategic grasp of its business value. As the traditional linear value chains of corporate organizations are transformed into extended value networks, wireless technologies are enabling fluid and secure collaboration. Nowhere is this more evident than in global supply chains, where one technology in particular is beginning to make a quantifiable difference to supply chain performance.

Radio Frequency Identification, or RFID as it is commonly known, has been around for over fifty years but recent advances in both cost and quality have meant it is now on the verge of large-scale commercial deployment. RFID technology comprises a whole architecture, from intelligent tags or transponders to readers, from physical integration in material flow systems to IT integration into SCM, ERP, MES and warehouse management systems. Representing a quantum leap on barcode technology, RFID tagging does away with line-of-sight scanning, holds vastly more amounts of information, enables simultaneous bulk recording and is robust enough to use in more challenging environments.

Minimizing error rates, saving on manual labor, securing goods against loss and counterfeiting while simplifying production and distribution processes, RFID technology also impacts your business performance at the front line.



Radio Frequency Identification (RFID) is a technology to clearly identify all types of objects without contact. It allows data to be acquired quickly and automatically using radio frequency. Unlike bar-coding, RFID technology enables the reading, writing and recording of data on the applied tag irrespective of location, type of environment, contact or visibility. Thus RFID opens up new opportunities in the areas of identification logistics, material management, production and service.

By optimizing product availability, allowing automatic replenishment, tracking ordered goods and giving staff more time to serve customers, RFID not only contributes to bottom-line cost savings but top-line business growth.

As the cost of individual tags starts to enable pallet- and case-level (if not yet widespread item-level) deployment, organizations around the world are cooperating on the development of global RFID standards. Early adopters stand to gain from strategic implementations and preferred supplier status, while those who wait until mandates force compliance risk making short-term investments and the wrong decisions. Organizations such as Wal-Mart and The US Federal Department of Defense have won much publicity for their recent mandates, but supply chain excellence is about more than compliance.

As consumers call the shots in what analysts are calling the Demand Economy, supply chains everywhere need to become more intelligent, more dynamic and more responsive. Continued survival and competitive performance depend upon knowing more and acting faster than your peers. RFID can only help you make this transformation once it is fully integrated into your existing environment and device data is processed into business events, allowing real-time decisions and dynamic supply. For this long-term transformation of their supply chain effectiveness, many companies have already turned to an all-in-one partner, Siemens.

The Real-Time Supply Chain

From the factory floor to the department store, integrated RFID solutions offer you greater visibility and performance control than ever before. Enabling collaboration across partner networks, the real-time supply chain keeps you in the business picture.

The business value of RFID implementation can be summed up in: satisfaction, savings, security, simplicity, speed, synchronicity and synergy. That's greater customer satisfaction, savings in operational processes, added security for your assets, simplified production and distribution, speedier logistics, synchronized collaboration and business-to-business synergy. RFID integration enables silent product recalls, smoother warranty handling, lower warehouse costs, reduced supply chain error, greater inventory accuracy, better expiry-date management, improved revenue through fewer out-of-stocks and, not least, less congestion at the checkout counter. With a fully integrated RFID system and redesigned business processes, your supply chain performance generates competitive advantage, your enterprise is in a much better position to sell more, satisfy demand, improve service and increase inventory turns.

But this vision of the real-time supply chain requires a strategic approach and combined engineering, technology and business skills. Because radio frequency identification produces far more data than traditional bar-coding, this flood of information needs to be filtered, analyzed and turned into actionable business knowledge. Navigating the transition to this real-time environment, Siemens approaches each new RFID engagement by listening carefully to its customer, leveraging its considerable knowledge base and systematically analyzing the current process landscape. Real-time supply chains are the result of collaborative partnership, where the focus remains the business specifics of each new situation and end-to-end solutions are developed on site.

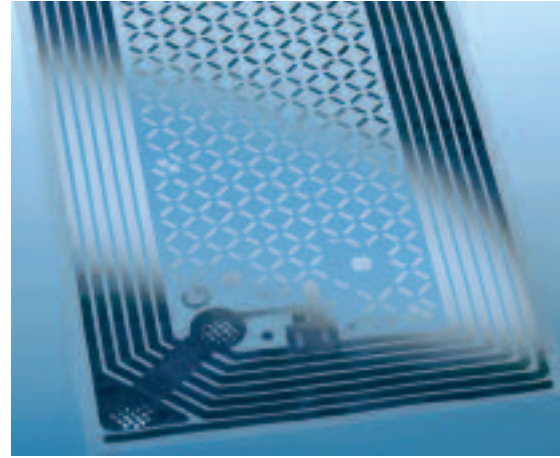


From transponders to business process transformation, Siemens already has a wealth of experience with RFID projects in your sector, experience which speeds up implementation and provides perspective and insight into your unique situation. Delivering best-of-breed products, proven business know-how and global availability, Siemens assures you of all-round RFID capability and sound business understanding.

According to an In-Stat report, the RFID market is set to swell tenfold by 2009 – from a worldwide total of \$300 million in 2004 to \$2.8 billion by that date. Wal-Mart currently estimates it will save \$8.35 billion per year through RFID implementation – from reduced stock-outs and enhanced protection against theft, error and vendor fraud to better pallet and case tracking, reduced inventory and manual handling savings. RFID technology looks set to be the most pervasive wireless technology since mobile technology, and can be applied across a host of segments and business activities. As well as manufacturing, logistics, retail, consumer packaged goods, aerospace and pharmaceuticals, these include spare parts management, event management, border and access control, personal as well as patient identification. As the horizon for RFID applications reaches out towards item-tagging and micropayments, progressive business leaders everywhere are giving careful consideration to test applications and pilot projects today. The trick to realizing all the potential benefits of wireless synchronicity, however, lies in cross-functional expertise and sector-specific process knowledge.

No Missing Links

Synchronize Your Business – Radio Frequency Identification



No Missing Links

As the owner of a unique full-scope RFID offering, Siemens brings the engineering experience, the integration skills and the process knowledge necessary to embed new architectures in your existing landscape and leverage the complete benefits.

Identified by Fortune Global 500 in 2004 as the world's number one electronics and electrical engineering company, Siemens is uniquely positioned to deliver the full promise of RFID transformation. Spanning the complete spectrum from products, automation systems and communication infrastructures to IT integration and business process redesign, the RFID offering from Siemens brings you a holistic approach which short-circuits the learning curve.

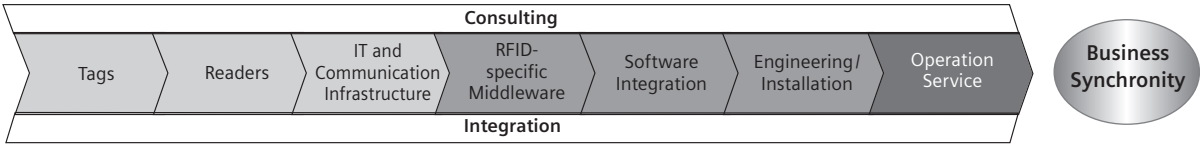
Siemens currently operates RFID test centers and laboratories in Grand Rapids (USA), Offenbach, Feldkirchen, and Magdeburg (all in Germany). With a solid track record of successful RFID implementations, Siemens is a mature partner for this new market, with 83% of customers in one recent survey already recognizing its full-scope capabilities*. With more than 25 years of experience in RFID technology, and over 250,000 readers installed worldwide, this offering is grounded in sound engineering know-how. Providing customized end-to-end solutions for every major sector, the RFID portfolio from Siemens is just one example of the company's internal network synergy. Bundling products, systems and services, this portfolio blends engineering, integration and consulting skills to realize the potential and secure the competitive benefits of RFID. Customers of Siemens in this field include ABB, Airbus, Bayer, BMW, Bosch, DaimlerChrysler, Ford, General Motors, Grundig, KarstadtQuelle, Kaufhof (Metro Group), Kühne + Nagel, Miele, Otto, SCA, Volkswagen, Volvo and Zeiss.

* IDC Multi-Client Project 2005, RFID (Radio Frequency Identification)
Status Quo und Zukunftsaussichten in Deutschland, 2005



Siemens combines its own customer insight as a user of RFID technology with its skills as a solution provider for others. Active across a unique array of business sectors, Siemens delivers RFID solutions for all key business areas. These include the automotive industry, transport and logistics, retail and consumer packaged goods, aerospace as well as pharmaceuticals. An active participant or supplier in many of these sectors, Siemens brings the all-important vertical process knowledge to bear in complex RFID integration projects (where critical challenges include integration into existing environments such as warehouses or production lines and the ensuing transformation).

The world’s leading supplier of logistics and factory automation equipment, Siemens is also the European market leader for industrial identification systems as well as a leading IT service provider enjoying vendor independence. This exact combination of qualities and capabilities makes the company the ideal partner to consider for step-by-step RFID implementations which ensure seamless transitions. Siemens has the breadth of industrial expertise to tackle the often demanding issues of physical RFID environments as well as the ability to carefully assess economic feasibility and demonstrate business value. With no missing links as a solution provider, the world’s number one electronics and electrical engineering company is at your side.



Seamless Production

Faced with intensifying global competition, today's manufacturers need to speed innovation and accelerate development and delivery cycles. RFID architectures can optimize just-in-sequence production, improve quality and streamline manufacturing processes.

As the world's largest manufacturer outside the automotive industry, Siemens is ideally suited to realize the potential of RFID technology in this sector. The company delivers unique added value through its in-depth understanding of production processes. And as the manufacturing sector continues to transform performances, Siemens is a recognized market leader in manufacturing process automation. Through its involvement in the automotive industry as a Tier One supplier, Siemens also understands the need of OEMs to accelerate innovation and cut operational cost. In today's globalized environment, component manufacturers and automotive players must synchronize complex supply networks and perfect just-in-sequence production. Radio frequency identification brings about many improvements here, from real-time asset tracking and better equipment utilization to improved quality, e-pedigree and operator efficiency as well as better visibility and integration of external production phases. Closing the loop from shop floor to ERP systems, RFID infrastructures can feed accurate and reliable real-time information into existing business applications for greater supply chain performance and enterprise agility.

In the manufacturing and automotive industry, RFID implementation delivers a host of additional advantages. Ideal for original equipment manufacturers who build several products on a single production line, or those who create complex or customized products in multiple factories across different locations, RFID can shorten design cycles, simplify multi-tiered supply chains and grow profit margins. By preventing sequence loading and installation errors, by avoiding the high cost of product rework and by enabling just-in-sequence automobile manufacture, this new technology drives competitive advantage and better brand protection.



Siemens has a wealth of experience helping automotive players leverage the benefits of RFID, including spare parts management at DaimlerChrysler, vehicle location systems at BMW and production processes at Volkswagen. Other customers also include Audi, Fiat, Ford, General Motors, Opel, SEAT, Skoda and Volvo. At Volkswagen's Golf production plant in Wolfsburg, for example, data acquisition times were narrowed from 30 to just 3 seconds, contributing to a more than 5 minute reduction in production cycle times. Siemens has also, together with Intel and SAP, demonstrated how this wireless technology can support KANBAN scenarios in the automotive industry at its RFID Technology Center in Feldkirchen. Simultaneously boosting the process security and data quality of lean material flow systems, RFID optimizes material planning, reduces error rates and accelerates transport processes. Integrating SAP Auto-ID Infrastructure, such tests demonstrated how highly complex and distributed business processes can be brought together and optimized.

RFID is also ideal in enabling real-time locating systems, improving vehicle tracking and management. Helping automotive manufacturers better manage the process of testing and verifying vehicles coming off the assembly line while tracking them as they go through quality control, containment and shipping zones, RFID speeds time to market and enhances customer satisfaction. With a partner already deeply committed to manufacturing and automotive excellence, you need look no further for the knowledge and experience to quicken your process execution and reinforce your market performance.

Competitive Packaged Goods

Driven by an ever-increasing product proliferation, the consumer packaged goods sector is experiencing the Demand Economy at first hand – with vanishing consumer loyalty, erratic fluctuations in demand and increasing expectations. Here too, Siemens is at your service with innovative RFID solutions.

Helping CPG players such as coffee company Lavazza and paper manufacturer SCA (Svenska Cellulosa Aktiebolaget) remain competitive on the shelves of retailers and in the homes of consumers, Siemens can help you reach beyond mandate compliance to stronger market performance. Companies in the consumer packaged goods market need to increase their inventory turns, shorten their replenishment cycles and compete more effectively in a crowded marketplace. RFID implementation with the right partner can result in real-time data integration, greater operational effectiveness, better customer understanding and stronger product differentiation.

Leveraging the synergies of the Siemens network, you can fast forward RFID effectiveness by partnering with an all-round hardware, software and process expert. Integrating diverse and disparate data at the right time, RFID-enabled supply chains not only meet your retailing mandates but generate new opportunities for added revenue and margins. Allowing better product replenishment and recall while minimizing shrinkage and providing better sales data, flexible and scalable RFID architectures consistently drive down your costs and improve your top-line performance. Leverage more control, for example, through detailed sell-by dating. Meet the Demand Economy head-on with an agile and intelligent supply chain which goes with the flow and keeps you in the picture. Enhanced production and warehouse efficiencies, compliance with retailer mandates, more competitive performance – the solutions are here.



Compliant Pharmaceuticals

Radio frequency identification can make valuable contributions to the pharmaceutical industry, including enhanced protection from counterfeiting as well as improved quality and compliance. Protect your margins with added intelligence.

More people die every year from medication errors than from automobile accidents, while an estimated 5% of pharmaceutical drugs on the global marketplace are counterfeit and, in the US, 40 billion dollars' worth of drugs disappears annually in the supply chain. A sector particularly exposed to loss, fraud and regulatory pressures, the pharmaceutical industry stands to benefit enormously from RFID implementation. The industry is also likely to realize item-level tagging earlier than most sectors for those same reasons. The cost and time investment behind innovation in the pharmaceutical business require players to leverage profitability at every level of the supply chain, to optimize internal collaboration and accelerate the physical flow of goods through the distribution channel.

RFID infrastructures can help you master all of these challenges, while combating counterfeiting through electronic tracking from production plant to hospital and pharmacy.

Siemens is a leading supplier to the medical sector in general, and can support complete pharmaceutical communities spanning manufacturers, wholesalers, pharmacies and hospitals. It has already introduced prize-winning RFID solutions in patient identification (at New York's Jacobi Medical Center and Germany's Klinikum Saarbrücken) and blood product identification (at Hanusch Hospital in Vienna). In the hands of an expert partner such as Siemens, RFID transformation in this sector can ensure faster identification processes, higher order fulfillment quality, more reliable operational procedures and lesser inventory along your supply chain. Protect your competitive market position, reduce your development costs, secure yourself against fraud and meet complex legal and statutory requirements with a technology that combines unparalleled visibility, quality and control.



Safer Aviation

Safety, airworthiness and operational efficiencies have always been priorities in the aerospace industry. As the sector braces itself for renewed growth and intensifying competition, RFID technology is helping to meet both customer expectations and regulatory requirements.

Knowledge, in any sector, is power. In the aerospace business, information excellence is critical when it comes to meeting regulations and providing data for planning and demand-based scheduling. Radio frequency identification helps to synchronize data flows in the aerospace industry and harmonize asset and parts management. Siemens is helping world-leading players such as Airbus stay on top of their game as a new wave of innovation redraws the market.

Delivering process consulting along with a concept for the A380 paint shop to Airbus, Siemens has created an innovative identification system for the optimization of logistical processes. RFID technology can also help aircraft manufacturers deploy a made-to-order model, control their costs and create an integrated manufacturing environment. Aerospace players often incorporate widely dispersed production facilities and extensive subcontractor networks. Integrated RFID can contribute to leaner processes with better maintenance and inspection data, ubiquitous tracking of spare parts and improved safety standards.

RFID technology can also provide enhanced security and reduced liability in baggage and cargo applications as it does at airports in Dubai, Paris and Madrid, including accurate tracking through sophisticated sortation systems combined with in-line explosives detection screening. The technology also enables real-time baggage reconciliation at aircraft entry points. Whether it is a question of tracking high-value tools and parts in production, optimizing paint-shop processes or perfecting baggage management, RFID solutions from Siemens leverage the combined experience, global reach and long-term commitment to make your transition to synchronized business a success.



FedEx

Joethom McGuff

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Synchronized Distribution

RFID implementation at transport and logistics enterprises can help save time and money while enhancing visibility and data quality. Synchronizing the flow of information and goods, this new technology enables ever greater logistical speed and precision.

Bridging the worlds of atoms and bits, RFID enables ever greater network and partner synergy. Today's global supply chains require absolute synchronicity and intense collaboration. As logistical processes undergo the transformation from traditional push strategies to innovative push-pull approaches, logistics players need to accelerate delivery times and keep costs to a minimum. Tomorrow's logistical playing field will require more shop-friendly shipping, more and smaller deliveries as well as more direct shipping.

As a world leader in logistics innovation, Siemens is currently integrating RFID technology into the process landscapes of numerous providers, including Hermes Logistik as well as Kühne + Nagel. RFID is proving instrumental in cutting warehousing costs, boosting security in transit, reducing shrinkage, speeding up deliveries and meeting fluctuating customer demand. The logistical performance at Otto, the world's largest mail-order retailer, is a case in point. Working in close collaboration with Hermes Logistik Gruppe, Otto's CEP provider, Siemens implemented an RFID infrastructure at item level to enhance security for luxury goods such as camcorders and mobile phones. During Phase I, over 20,000 RFID transponders were applied at the Hamburg warehouse, enabling seamless visibility, reduced shrinkage and speedy delivery across 64 Hermes depots and on to the end customer. Delivering a 21% saving in logistical costs, this pilot project has more than proved the business value of RFID technology.



Meanwhile, Siemens has recently implemented one of the world's first intercontinental RFID projects along with printer company Océ, logistics partner Kühne + Nagel and Lufthansa Cargo. CIO at Kühne + Nagel, Thomas Engel assesses the value of the new wireless approach: "The technology's increased real-time capabilities offer an opportunity to complement barcode-based systems or even replace them." And as CFO Maximilian Meyer at Océ reminds us, it's all about customer service at the end of the day: "As printing systems producer we put the customer first. RFID technology will contribute to meeting customers' high service level requirements in the future too."

This pilot project has contributed to the development of common RFID standards, utilizing innovative Ultra High Frequency (UHF) tags which operate both within the standard European and US frequency ranges. Providing visibility and control along an extended supply chain from Munich to New York, the project complies with EPCglobal recommendations. From Océ's manufacturing plant near Munich, where printers and accessory kits are tagged with RFID transponders, to the company's US distribution hub in Mount Laurel, New Jersey, optimal supply chain monitoring and security is ensured through multiple partner channels and warehouses. With over 20,000 employees in 96 countries, Kühne + Nagel is one of the world's leading logistics companies. Now with a first-class RFID partner at its side, it is fully prepared for next-generation logistics and global supply chain excellence. Synchronizing distribution on a global scale, RFID is delivering on its promise.

Satisfied Customers

Faced with vanishing margins and fickle customer loyalties, retailers need to deliver more satisfaction at the checkout and perfect their product availability. RFID solutions from Siemens are leading the way in transforming retail performance.

In the United States the recent mandate introduced by Wal-Mart – one of the strongest drivers of RFID implementation – has concentrated attention on this innovative technology. In Europe a majority of retailers are pushing forward with RFID implementation over the next year and a half. Retailers across the world are challenged to provide more personalized shopping experiences and grow customer lifetime value at the same time as perfecting their inventory management and empowering their employees to work more effectively. The retail environment, exposed to rapidly growing competition, narrowing margins and erratic customer behavior, stands to gain efficiency in warehouse and store operations. Moreover, the improvement of the consumer's shopping experience through higher product availability, better product placement and shorter check-out times will determine the competitive level of customer loyalty.

Leading in logistics innovation and with a complete portfolio of logistic solutions including automated cross-docking systems and pick-by-voice systems, Siemens is currently involved with a number of key retailers such as METRO and Tesco to realize the benefits of RFID transformation. Since July 2004 it is also a participating member of the METRO Group Future Store Initiative, a consortium of leading companies from the retailing, consumer goods and information technology industries focused on delivering solutions for tomorrow's retailing. As part of The Future Store Initiative, Siemens has already delivered an advanced RFID infrastructure spanning the entire supply chain from manufacturer to logistics supplier to retailer and end customer. In the words of Dr. Gerd Wolfram, chief executive of MGI METRO Group Information Technology Ltd: "This is a fundamental modernization process. New technologies are available which not only optimize our processes but change our relationship with customers and partners."



The fifth largest trading group in the world, METRO recently piloted RFID technology at two of its Kaufhof department stores. Tracking every individual textile product along the entire supply chain – from textile manufacturer Gerry Weber to logistics partner Meyer & Meyer to retailer Kaufhof – the new RFID infrastructure minimizes transport losses, speeds up logistical processes and makes life that much simpler for warehouse staff. As one warehouse manager from Kaufhof puts it: “With RFID, my job has become much easier.” At each stage of the supply chain, RFID integration is delivering results – providing better monitoring of incoming goods as well as more efficient stocktaking, enhancing merchandise security as well as leaving staff with more time to serve their customers. From the customer’s point of view also, RFID-enabled shopping delivers improved order tracking, more intelligent shopping assistance, better product availability and choice along with faster service and added convenience.

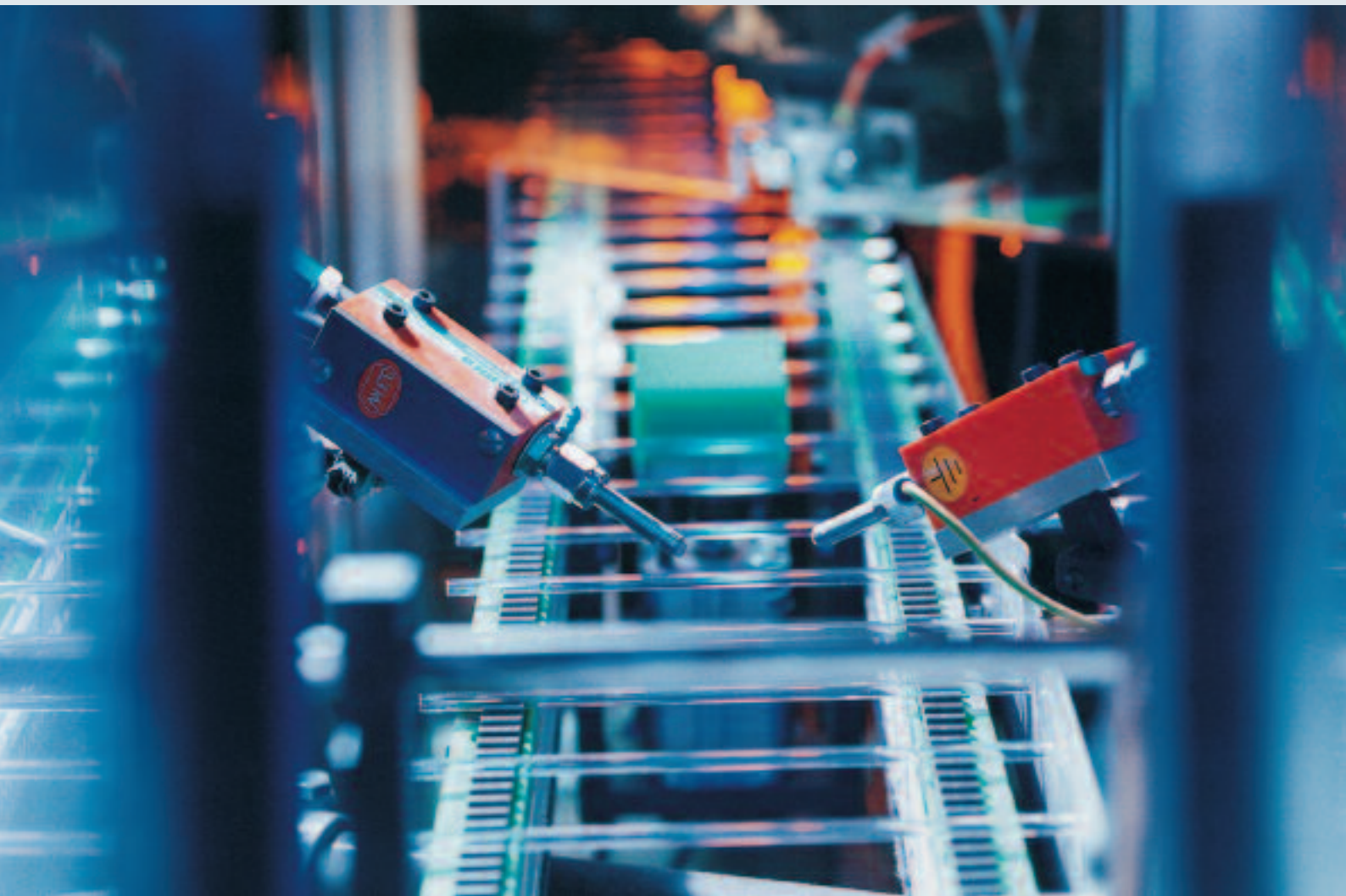
As Gerd Wolfram says, “RFID technology is a new revolution in retail. This revolution will have more impact than the introduction of barcodes.” Not least among the advantages in retailing, of course, is the fact that unique Electronic Product Codes enable individual product recalls, thus avoiding the costly category recalls necessitated by bar-coding. Synchronizing consumer demand with retailing supply, integrated RFID can facilitate more sales and better customer service than ever. Why settle for mandate compliance when supply chain excellence is now so easily within reach?

Driving Innovation

In a world still waiting on global RFID standards, Siemens along with its partners is driving innovation through a broad range of initiatives, pilot projects and scientific research.

While some customers across the world are clearly waiting for global RFID standards to emerge, and others wait until partner mandates necessitate implementation, Siemens is helping its customers gain an early lead by developing economical solutions. Siemens is involved in the development of polymer-based electronics which retain functionality but dramatically reduce the cost of implementation and can bring forward mass application at item level. At its Feldkirchen test center in Germany, Siemens partners with key players such as Intel and SAP to replicate real-life sector processes and demonstrate RFID-enabled supply chain dynamics. Here, for instance, SAP Auto-ID Infrastructure (part of SAP NetWeaver™) has been successfully used to integrate RFID technology into an existing ERP landscape.

Elsewhere too, Siemens is leading the way in mass RFID application. Together with The Fraunhofer Institute, a German institute for research and development, Siemens is conducting intensive testing at the LogMotion laboratory in Magdeburg. Siemens is also a member of boards such as EPCglobal, The Future Store Initiative and the German Automotive Association (VDA), ensuring it plays a central role in the future development of industry standards. Pilot projects involving UHF such as those at Océ and Kühne + Nagel, compatible with both American and European current practices, are another step towards standardization. When, in the not too distant future, global RFID standards are agreed upon, Siemens will be right at the heart of market evolution with its portfolio, its track record and its innovations.



Excellence in Automation

The European leader in industrial identification systems, Siemens has more than 50,000 employees worldwide dedicated to automation and drives technology. Providing a comprehensive product family of RFID systems and sensors, Siemens can look back on more than 25 years of experience with this technology and has installed over 250,000 readers worldwide. In the words of Helmut Gierse, automation group head at Siemens: "We are witnessing a significant growth in RFID projects to optimize the corporate value chain. These are bringing down warehouse costs and making visible every link of the supply chain from the production of goods to the end customer. RFID technology is becoming increasingly attractive through falling semiconductor prices which result in cheaper tags – the biggest cost factor in logistics solutions for mass produced goods."

Siemens delivers a complete portfolio of RFID systems for production, logistics and distribution, compliant with the requirements of EPCglobal and ISO standards. These also cover various frequency ranges and support easy integration into automation systems as well as at the MES and ERP levels. Siemens has already established a solid track record in installing RFID hardware across multiple sectors, including manufacturers such as DaimlerChrysler and Johnson Controls, retail players such as Metro/Kaufhof, Otto and KarstadtQuelle, along with CPG enterprises such as Lavazza, and SCA. Fast and secure data transmission with Siemens hardware offers shorter cycle times, simplified commissioning and fault clearance along with robust performance for any environment.

Unique Benefits

Synchronize Your Business – Radio Frequency Identification

Unique Benefits

By choosing to partner with Siemens for your RFID implementation, you are benefitting from a unique range of advantages – including all-in-one expertise, global availability, long-term commitment and investment synergy.

For over 150 years, Siemens has stood for integrity and innovation. With more than 25 years of experience manufacturing RFID devices and more than 250,000 RFID readers installed across the world, Siemens is well placed to understand the potential and meet the requirements of successful integration.

By bundling the capabilities of a number of Siemens groups, a unique end-to-end portfolio is now available globally. A demonstration of network synergy, this RFID portfolio leverages the depth and breadth of Siemens, brings you early access to the latest technology and ensures best-practice implementations. This single coordinated approach also provides you with one contract and a single point of contact – delivering significant advantages in terms of cost, administration and logistics. Rather than trying to coordinate a raft of engineers, business consultants and IT experts, you get an all-in-one engineer, system integrator and process expert who will consistently drive your RFID implementation to meet its business expectations. And with a stable, scalable RFID infrastructure, you are perfectly placed to roll out further extensions as this wireless technology becomes standardized and generally available. There are many benefits behind radio frequency identification. Multiply them with additional benefits in partner simplicity and synergy.



Excellence in Logistics

Not only does Siemens offer you a complete range of RFID hardware and systems, but its excellence in logistics also results in cost-optimized and customized physical integration in material handling systems. With around 10,000 people devoted to this area, Siemens is the world leader in logistics and factory automation equipment and systems. Head of the logistics group at Siemens, Johann Löttner sets the scene for RFID transformation: "The logistical processes of the future will be more influenced by customer demand than traditional forecasting and planning. This requires change at every step along the supply chain. Through the installation of read/write transponders, data can be directly applied to objects – making transport routes, fault tolerance and product records immediately transparent. This results in simple and automated processes along the supply chain."

The Siemens track record in installing material flow solutions includes manufacturers such as DaimlerChrysler and Volkswagen, retailers like Quelle and Tesco, as well as airports in Paris, Madrid and Dubai. Siemens is especially adept at applying innovative ideas for cost-effective implementation, including dynamic labeling, mobile vehicle readers and high-bay inventory tracking. With its RFID test centers, Siemens provides rigorous testing in real-life scenarios and has achieved 100% read rates at belt speeds of 3 meters per second (600 feet per minute). Ensuring your RFID hardware is embedded in the most competitive and effective physical layer, Siemens delivers cutting-edge answers to the age-old logistics challenge: The right material in the right quantity, at the right time, in the right place, with the right quality and at the right cost.

Collaborative Partnership

Working partnerships with Siemens are known for their intense cooperation and trusted for their integrity and durability. Scale your RFID strategy to business demands with an experienced and knowledgeable long-term partner.

RFID projects demand the maximum in cooperation and close teamwork. Wilfried Kanzok at Kaufhof appreciates the close collaboration at Siemens: "The Siemens coordination of RFID activities involving different technology partners ran very effectively. The balancing of differing interests and their potential difficulties led to excellent time-keeping within the project." Joining the dots between all your supply chain coordinates, Siemens helps you to fully integrate RFID benefits while keeping within timescales and budgets.

Not only do multiple Siemens units cooperate seamlessly, but a wide network of partnerships with leaders such as Intel, SAP and Microsoft ensures your complex supply environment is supported at all levels. Siemens, for example, is the world's largest SAP® system integrator. With excellent partner management skills and the scale to act as prime contractor, Siemens speeds up your RFID transformation and mitigates investment risk. Known for its ongoing development approach, Siemens distinguishes itself in the market by its customer retention and service renewal rates. Supply chain transformation is no overnight recipe, and your success depends on the track record and follow-through of your partners. With a full-scope partner and prime contractor like Siemens, synchronizing all the complex elements within RFID projects, you can leverage continuous supply chain improvement.



Excellence in Business Services

Siemens is also a leading IT service provider and business process consultant. Delivering a full service chain from Consult, Design and Build to Operate and Maintain, Siemens blends its unique multi-sector expertise with IT vendor independence to bring its customers best-practice thinking with best-of-breed technology. Successful RFID implementations require an intimate knowledge of vertical processes, and Siemens has accumulated deep process experience while serving some 10,000 customers across manufacturing, financial services, the government sector as well as many others.

As a business consultant and system integrator, Siemens can also leverage its own experience implementing complex RFID projects across multiple business areas. A top ten global outsourcer, Siemens leads the way in innovative partnering and financial arrangements, while combining global sourcing efficiencies with IT utility power. The world's largest vendor-independent infrastructure maintenance provider, Siemens delivers all-round support for your hardware, software and process environments as well as financial coverage of all activities bundled into managed RFID services.

By analyzing your existing business processes and the impact of RFID integration, the consulting experts at Siemens together with your experts can re-engineer your process landscape to benefit fully from RFID data synchronicity.

Word of Mouth

Nothing spreads credibility as much as word of mouth. Listen to what some of our customers have been saying about RFID technology and Siemens partnership. As the time approaches to implement a strategy, decide for yourself on the best choice of working partner.

Wilfried Kanzok, head of Central Functions at Kaufhof, puts the success of his RFID implementation down to the blend of capabilities at Siemens: "The interplay of technical know-how, process expertise and software consulting was the decisive factor for us. The cost-value calculation system introduced by Siemens is an essential element in internal presentations and a key argument in discussions on this new technology."

Meanwhile, Professor Michael Schenck at The Fraunhofer Institute explains why Siemens was the right fit: "We chose Siemens as our partner for this test laboratory – the only one of its kind in Germany – because we were impressed by their consulting and integration expertise and their experience in RFID projects."

At New York's Jacobi Medical Center, CIO Daniel Morreale sums up the quality of collaborative partnership: "Siemens listened and delivered a solution that not only meets our immediate needs but also leaves us with the flexibility to explore further options. We value our partnership."

Finally, Ed Tworek, GM's Engineering Group Manager, explains why General Motors decided to go with a market leader for the RFID transformation of its paint-shop environment: "We first validated the product technology against the competition, and we found the Siemens RFID equipment to meet or exceed performance levels of other major product manufacturers. Secondly, there was a competitive bid between the validated manufacturers of like RFID products. Siemens provided the best value proposition of lowest overall cost with the ability to provide global service and support." In addition, the reliability and expandability as well as the networking capability of the product made Siemens RFID the clear winner.



Across multiple business sectors – from manufacturing and logistics to retail, consumer packaged goods, pharmaceuticals and aerospace – Siemens is applying its deep process knowledge, its powers of integration and its engineering insight into cutting-edge RFID projects which are delivering on supply chain excellence. If your business can benefit from this revolutionary technology, why not talk to the best-qualified partner?

Unique Reasons to Partner with Siemens

- Unique full-scope RFID offering, spanning hardware, physical infrastructure, middleware, IT integration and business process transformation.
- Over 25 years of experience in RFID technology
- Over 250,000 devices installed globally
- Dozens of successfully implemented RFID infrastructures
- A choice of test centers and laboratories to assess the business benefits of sector-specific implementations
- 100% read rates achieved under real-life conditions at belt speeds of 3 meters per second (600 feet per minute)
- Global supply chain expertise with one of the world's first transatlantic RFID implementation
- Global support for your extended supply network
- Over 100,000 people worldwide dedicated to automation, logistics, IT services and business process engineering
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