RFID NEWS
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MARKET & BUSINESS NEWS

Alien Technology RFID Academy - Learn the basics of RFID as well as advanced technology. Courses cover design, installation, troubleshooting, managing RFID, and implementations. RFIDSupplyChain.com is offering these courses on their website. Each course is taught using real-world use case examples applied to interactive discussion, role-playing and simulations. The RFID Academy, when taught at the RFID Solution Center Dayton, is further enhanced by leveraging the center's 15,000 square foot simulated supply chain giving students the opportunity to apply RFID in manufacturing, packaging, distribution and retail environments. The following is an overview of the courses offered:

1. RFID Now! – provides up-to-date understanding of today's RFID landscape through science, standards, breakthrough technologies and best practices behind RFID solutions.

2. RFID at Work! – provides the skills to successfully initiate the analysis, design and implementation of RFID solution through practical in-depth instruction and hands-on guidance.

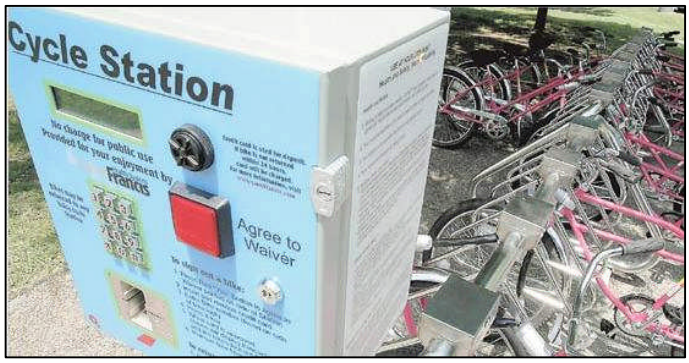
3. RFID Optimized! – challenges professionals who need to manage or troubleshoot RFID implementation through analysis of business case factors, customer requirements, environmental factors, equipment configurations and workflow processes.
Source: WebWire.

AMA & RFID - The American Medical Association issued a report that gave mixed reviews on the use of implanted RFID based technology to keep track of medical patients. The report concluded that while implanting the technology into humans could improve patient care, it also has yet to be proven safe or secure. These devices may present physical risks to the patient according to the report said. ***[Chips have been implanted in pets and livestock for a long time with no problems reported.]*** The U.S. Food and Drug Administration (FDA) approved use of the technology in humans in 2004. The AMA recommended that use of the technology only be used with the approval of patients after they are warned of the potential problems. ***[Actually, that is the law in some states.]***

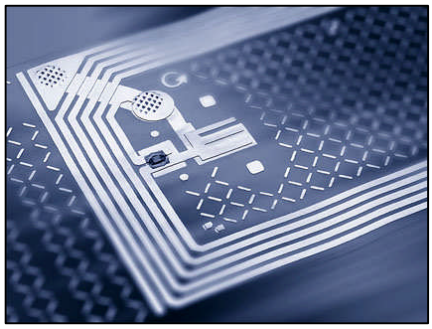
Wi-Fi RFID Tag Market - The Wi-Fi RFID tag market will grow more than 100% annually through 2010 according to Electronics Research Network. Despite some hurdles to overcome, the technology is attractive because Wi-Fi RFID allows businesses to leverage their existing Wi-Fi investments for asset tracking. Historically, one of the key weaknesses of this market has been the short battery life of asset tags. G2 MicroSystems, the only tag-specific Chip vendor, has made strides in overcoming this weakness and

offers multi-year battery life. AeroScout shipments accounted for the majority of all Wi-Fi RFID tags. Key verticals for growth will be healthcare, heavy manufacturing, transportation, and logistics. Security, while there will still be battles over privacy, will be an increasingly important area. Source: Wireless Technology

RFID APPLICATIONS



RFID Bike Control - QI Systems (Canada) is provider of contactless, access control, and tracking systems. QI introduced an RFID-based bicycle rental automation system that will allow the public to check out and return rental bikes from unattended bike racks. The Cyclestation system will be initially deployed in the Tulsa, Oklahoma. Each bicycle is tagged and secured to the RFID reader-equipped rack. To check out one of the bikes, a user scans a credit card for identification and authentication. The bike is released for the user to ride for a prescribed amount of time. If the user does not return the bike within that time, the swiped credit card is charged a fee. The system determines the presence of each bike based on whether its RFID tag is within range of the reader. The racks are all wired to a central server so the system can monitor the bicycle inventory across multiple locations. This allows users the convenience of being able to check in a bike at any of the racks within a system, not just the one where the bike was originally checked out. Source: RFID Update.



Drug Counterfeiters vs. RFID Cops - There's plenty of drugs counterfeiting going on everywhere and Europe is no exception. This creates motivation for implementation of RFID in European Pharmaceutical Markets. Use of RFID by Europe's pharmaceutical industry will continue to be driven by increasing counterfeit products in the market. Frost & Sullivan finds that the European Markets for RFID in Pharmaceuticals earned revenues of $18.0-million in 2005 and estimates this to reach $464.8-million in 2012. Globally, about 5 - 8% of prescription drugs are counterfeit. This is more about safety than lost sales. There's also a big liability for pharma companies. But the lack of interoperability and harmonization of standards remains a key issue. EU member nations will have to arrive at a consensus so that even as the initial cost of implementation is minimized, long-term sustainability can be achieved. And RFID vendors need to keep up with the regulatory and technological requirements of various countries and work closely with government agencies to ensure a smooth transition from bar codes to RFID. However, in the short term, companies cannot

afford to dispense with bar codes and will need to adopt an informed approach towards implementing RFID. Source; Frost & Sullivan

RFID Tagged Sponges - While left behind metal instruments have been easier to detect, items like sponges, can go unnoticed to be left in the patient. The SmartSponge System™ is the first of a family of products developed by ClearCount Medical Solutions (Pittsburgh) to solve the problem. The system consists of a handheld wand-scanning device used to detect commonly used surgical gauze sponges fitted with a RFID chip. RFID tags are transponders ready to react to a radio signal sent by transceivers - RFID scanners. The SmartSponge System has the ability to count multiple sponges at once without separation. Benefits of RFID include: passive with no battery, small - the size of a penny, won't count the same sponge twice. While the initial target is sponges, the RFID technology is being applied to instruments and other surgery items.

European RFID Market - Metro Group, one of the largest retailers in the world, will deploy Reva Systems' Tag Acquisition Processor in what may be the largest production-scale rollout of RFID in Europe. The E.U.-based retail company has begun to install RFID infrastructure in about 200 stores and distribution centers. Metro Group tested and evaluated RFID products for standards-based performance during pilot programs and chose Reva's Tag Acquisition Processor (TAP) products to manage its distributed network of RFID installations. The system will provide accurate data and rapid operator feedback, Reva said. Metro stores will use RFID to enhance distribution and receiving, using tags and data to improve efficiency, customer service, and inventory management. TAP allows users to control all RFID readers in Metro's facilities, to process raw tag data into accurate and useful information, and to determine real tag locations in difficult environments, Reva said. Metro Group required an infrastructure that eliminates duplicate tag readings and can determine tag relevance in places such as loading docks, where operators need quick and accurate feedback to confirm that goods have been shipped and received. Metro Group is the fourth-largest retailer in the world with sales of about $60-billion Euros in 2006. The company employs about 270,000 people and operates about 2,400 outlets in 30 countries. It owns Metro/Makro Cash & Carry, a cash and carry wholesale chain, Real hypermarkets and Extra supermarkets, Media Markt and Saturn, which sell consumer electronics, and Galleria Kaufhof department stores. Source: EE Times.

RFID in Transportation - Ship2Save announced that Megatrux (CA) has extended its logistics with an asset management and tracking system using RFID and Ship2Save's Operation Management System. The multi-dock deployment has enabled Megatrux to automate operations and provide added value services to its clientele. The RFID will allow display of more accurate information to customers in real time and serves to deliver key performance indicators

[KPI] for proactively. They anticipate extending RFID system to warehousing and distribution to Trans-Pacific container, storage and cross-docking imports. The RFID application also serves to provide needed Electronic Product Code (EPC) compliancy for Megatrux clientele with goods destined for Wal-Mart. As the Wal-Mart RFID mandate begins to broaden to 1000+ suppliers, many logistics providers are bridging this technology gap for their clientele by offering RFID services that adhere to Wal-Mart's requirements. Ship2Save is one of the industry leaders in RFID Solutions and is a founding member of the Canadian Microsoft RFID Council, a member of the Microsoft Global RFID Council, an EPCGlobal Canada Strategic Council Member, a CompTIA RFID+™ Cornerstone Committee Member, and a member of Texas Instruments Tag-It™ Team. Source: Supply Chain Market.

RFID Use in Food Sector - The use of RFID along the food supply chain is set to rise dramatically to $5.8-billion in 10-years per IDTechEx. The amount includes the money spent on RFID systems plus the tags in 2017. RFID use in the food sector will become more important than any other application of the technology. RFID technology is helping to transform logistics by providing a means of tracking and tracing individual products throughout the supply chain. Regulations on traceability and mandates from such giant retailers as Wal-Mart and Metro are slowing forcing processors to make investments in the technology. Eventually, the tagging of individual items will attract the most investment, benefiting all in the supply chain but tagging of conveyances, pallets, cases, vehicles and equipment will also be important. The use of RFID on animals and in farming is similarly rising rapidly in the amount of money spent, to $2.6-billion in 2007, from an expected $462m in 2007 per estimates IDTechEx. Source: Progressive Magazine.

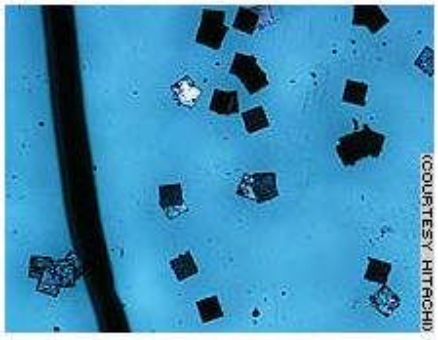
Canadian RFID Study - The Canadian Council of Grocery Distributors and Food & Consumer Products of Canada announced the results of the RFID test-drive in 2006. Suppliers who participated included Maple Leaf Foods, General Mills Canada Corp., Kruger Products Limited and Unilever Canada Inc. IBM lead the product implementation with technologies from Intermec and Motorola. The project involved the "slap and ship" method of applying RFID tags to products that are managed in logistics and warehouse operations. IBM said that read rates increased from 71 to 89% over the course of the pilot, in part because everyone involved got better at placing the tags on products. The report also looked at the costs involved in such projects, 81% of which could be attributed to the tags and the labor involved in deploying them. IBM said RFID-based supply chains performed better the earlier the tags were introduced into the process. It also helped identify incorrect "picks" in a warehouse earlier on and if shipments were short. Source: IT Business.

TECHNOLOGY

RFID/GPS - The new tag by Identec, called a GPS tag, uses a satellite that can give the specific location and movement of assets. With read/write range in excess of 500 meters, the tag can be activated at any time with a reader, thereby providing increased ease of access and reduced infrastructure. This technology can be used for any type of asset or personnel tracking application and in particular for container and port transit. Source: IW.

See, "When Will Printed Electronics Work for RFID Tags?" in PE report.

RFID Jewelry - The diamond ring of the future will use an RFID chip embedded in it like a jewel. Hitachi Research Labs in Japan have devised the smallest RFID tag ever, tinier than a grain of sand; 0.05 mm x 0.05 mm. The so-called powder chip is thin enough that it can be mixed with paper pulp to add a layer of counterfeit protection to gift certificates, passports and currency. It's also caught the interest of the jewelry industry, which could invisibly embed the chip in rings and necklaces to track their origins, making them more difficult to sell illegally. Each chip stores a unique 38-digit ID number. The code is integrated into the chip's circuitry, making counterfeiting impossible. Hitachi has sampled the chip, but plans to take it to market in 2009. Wal-Mart might be one of the first retailers to debut the radio dust since they are pushing RFID technology forward and downward, eventually to item level. Source: Popular Science.

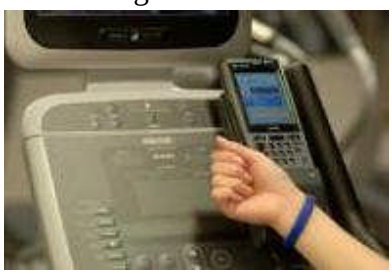


Hitachi's radio tags are smaller than the width of a strand of hair.

RFID and Home Healthcare - The United Kingdom has over 15-million who suffer from long-term conditions. The ageing population and the increasing prevalence of long-term conditions, such as diabetes and cardiovascular disease, mean that the use of information and communication technologies (ICTs) will become an essential feature of healthcare delivery enabling the NHS to cope with the increasing burdens and challenges posed by chronic illness. At present, the UK has a reactive healthcare system that is predominantly geared up to respond to acute exacerbations of chronic illness. In the future, a more proactive model of healthcare delivery will be necessary to meet the demands of our changing patterns of health and illness. Such a model means that promoting self-management and optimizing the management of long-term conditions will be a central feature – and it is for these reasons that ICTs are going to have an increasing role. Home telecare technologies will be used by both primary and secondary care providers. RFID will be used more often. RFID is already being used within the NHS to track equipment within secondary care. It could easily be used in the

future to help with or check medication adherence at home. Furthermore, RFID technologies and global positioning systems could be used to help track people. This could be particularly pertinent for monitoring of individuals with dementia being supported in the community. Sensor technologies are another area where rapid developments are taking place, which could facilitate improved monitoring of long-term health conditions at home. There are already a plethora of home-monitoring devices, which can measure a range of parameters such as blood pressure, pulse, weight, temperature, heart rhythm, oxygen saturation and blood sugars. These devices can be used to upload data for review by a health professional or automated system elsewhere but continuous and automatic monitoring will be used in the future for wider applicability of home telecare systems. Source: Healthcare Equipment and Supplies.

Casio's RFID Wristband - the Casio Check-Fit wrist-worn system let's you check in to a club, track your training on the machines, pull up your training records on a PDA station or check your health parameters with a fully automatic hemadynamometer body constitution analyzers. The Casio Cassiopeia DT-5200s (PDA type product) are mounted on the fitness machines have a VOIP client so you can chat with your trainer when you have a question. [This opens the door to India based call centers acting as personal trainers and a new mode for health ads]. Source: Casio PR.



More RFID at Casinos - Gaming Partners International placed a $1-Million order from

Planet Hollywood Resort & Casino a supplier for low-frequency RFID chips. GPI was selected as the table game equipment supplier for Planet Hollywood's state-of-the-art gaming area featuring 95 table games, providing all of the chips, RFID readers, layouts, dice, playing cards and the gaming tables themselves. The gaming tags will be used chips in denominations of $25 and up. Early adoption of RFID gaming chips demonstrates the commitment to deploying the highest security possible while maximizing the aesthetic appeal of their gaming area. Source: PRNewswire.

RFID Will Track China to U.S. Shipping - Ocean cargo shipments originating in Shanghai and arriving in Savannah, Georgia, will be tracked and secured with an active RFID technology, port authorities announced at a logistics trade event this week. Savi Networks announced its tags and software will provide the infrastructure for the new Shanghai-Savannah Express Trade Lane Project. The pilot just started and will involve 500 containers tagged with Savi's active RFID-based cargo seals. Tagged containers will be identified when they arrive at the gate at the Port of Shanghai, when they are loaded onto ships, when they are offloaded in Savannah, and when they leave the Savannah port by truck. Shanghai International Port Group (SIPG), which operates the Shanghai port, already uses a similar system from Savi to track shipments to Yantai, China. The seals operate at 433.92 MHz and conform to the new ISO 18185 standard for electronic cargo seals, which is based on the ISO 18000-7 air interface protocol standard for active RFID. Savi worked with officials in China to secure approval for ISO 18000-7 and related

standards (see De Facto Global Standard for Active RFID is Emerging). Handheld and fixed-position readers are being installed at strategic points at the ports, including on the large cranes that unload containers in Savannah, to automatically identify shipping containers. Once the Shanghai-Savannah pilot is complete, the port operators and logistics providers will evaluate if the system should be continued or expanded. Nelson said such systems can be expanded up and down the supply chain by adding read points at manufacturing and distribution facilities. The Port of Shanghai is the largest cargo port in the world by tonnage and the third largest in container throughput. This year Savi Networks announced new implementations in Hong Kong, Thailand, the Netherlands, and South Carolina. Savi reports the U.S. military has deployed its tracking technology at more than 1,500 locations and uses it to track more than 35,000 shipments by land and sea annually. Source: RFID Update.

RFID Steel Tracking - Steel producer ThyssenKrupp Steel is incorporating RFID technology and processes in a new Brazilian mill it is building following a successful pilot project. Sybase iAnywhere announced its RFID Anywhere infrastructure software will be installed to track steel shipments from ThyssenKrupp's new mill under construction in Sepetiba, Brazil. ThyssenKrupp plans to open the mill in 2009 and produce five million metric tons of steel there annually. RFID Update spoke with Martyn Mallick, director of RFID technologies at Sybase iAnywhere, about the initiative. Sybase iAnywhere and consulting firm Accenture worked with ThyssenKrupp to develop an RFID tracking system for steel slabs, which ThyssenKrupp currently produces in Brazil and exports to Germany. The companies completed a successful pilot that featured UHF smart labels to identify 1,000 steel slabs at ThyssenKrupp facilities and ports in Brazil and Germany. The system remained in place after the pilot concluded, and the application will be expanded with additional read points when the new facility comes online. ThyssenKrupp has very tight unloading times at ports and they only have about three minutes to identify and unload each slab. The benefits they received from the RFID pilot were timesavings and reduced labor. Slabs were previously marked with human-readable text for identification. Manual identification is slow, and bar coding was ruled out because of readability concerns. Slabs are often stored outside, where the direct sunlight plus ice and snow makes reliable bar code reading difficult. These conditions posed no challenge for UHF RFID technology, and neither did ThyssenKrupp's three-meter read range requirement. But the company faced other challenges, notably potential interference from the steel slabs and from the electromagnetic cranes used to move them. ThyssenKrupp reads its tagged slabs using a combination of handheld computers from Psion Teklogix and crane-mounted readers from Alien Technology. The tags are encoded in the EPC Gen2 UHF protocol and produced on modified smart label material with SATO printer/encoders. The tags are read during the unloading process to quickly identify the slabs. The RFID Anywhere software is used to manage the readers and printer/encoders and to manage RFID data flow between devices and ThyssenKrupp's enterprise applications. The software provides a central data repository and provides formatted, processed data to ThyssenKrupp's yard management system and database applications. Source: RDID Update.