



IDTechEx

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Highlights of IDTechEx/ PIRA Conference Intelligent & Smart Packaging USA 25 - 26 January 2005 By Dr Paul Butler & Dr Peter Harrop

This major conference on intelligent and smart packaging took place in Orlando and was made up of sessions on integrating intelligence into brand packaging, innovations for low-cost electronics for packaging, anti-counterfeiting and supply chain intelligence, consumer interaction and enhanced functionality, smart packaging in pharmaceutical applications, and material and design issues. Around 160 people attended the event. Overall, we were hearing that non-RFID smart packaging is moving forward very rapidly with brand enhancement one of the main benefits. By contrast, it is proving more difficult than most anticipated to make UHF RFID work with pallets and cases and CPG suppliers are often dragging their feet on this one because they are finding it tough to identify paybacks. An ARC report was quoted that finds only one of 100 Wal-Mart suppliers interviewed identifying a payback of under two years from pallet/ case tagging even when the systems are made to work satisfactorily..

Integrating Intelligence into Brand Packaging

Peter Harrop of IDTechEx opened the conference with a summary of progress since last year and listed important examples in society and industry where smart packaging is badly needed to help solve problems such as crime, accidents, medical errors, costs and waste, and support consumers in their increasing demands. Current packaging is generally failing in many of these areas, mainly because the human/packaging interface is so poor. This offers an opportunity for smart packaging, and this theme was picked up and amplified by various speakers who followed. In these efforts, it is important not to be restricted by conventional packaging thinking, and examples were given of technological innovations that might be applied to packaging but were being developed in other imaginative parallel industries.

The erosion of brand value is a key problem in companies such as Procter

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Highlights of IDTechEx/PIRA Conference (continued)

& Gamble according to William Connolly, who examined some of the brand building opportunities offered by smart packaging. Competition has never been stronger, and brands have to be sustained and grown by innovation if they are to continue to be successful. The name of the game is to create unique ownable solutions that work both at the first moment of truth (when the consumer chooses the product) and at the second (when the consumer uses the product). Examples were given of package advertising that involved story telling, more personalised messaging and physical targeting, and of packaging where there were increases or improvements in product value for the consumer. For example, they seek electronic colour displays on disposable packaging that could show the result of the chosen hair coloration with hair dye. In addition, smart packaging could play a part in reducing the costs of doing business – the example given being that it might be possible to reduce the total advertising budget by transferring some advertising to the package itself on-shelf where it would be more effective at targeting potential buyers than an expensive and unfocused TV ad campaign. Direct in-store communication to consumers via improved packaging so that products stand out in a sea of coloured noise was also the theme of the presentation by Brian Sobecks of Kraft Foods.

Clifford Friend of Cranfield University went back to basics in examining some of the challenges facing the commercialisation of smart packaging.

The Gartner hype curve was introduced and buyer/utility mapping as a way of capturing, documenting and focussing on consumer needs. In smart packaging it is important to have a vision - a great and bold plan of the ultimate all-communicating package - but bringing such a radically new product to market is going to be a lengthy process, particularly when not all the necessary technologies have been fully developed. One approach to encouraging a wider diffusion of consumer knowledge and experience with smart packaging is the commercialisation of simple, less smart products that can be introduced into the marketplace quickly, and help create stepping stones in the minds of consumers to the ultimate great and bold vision.

Innovations in Low Cost Electronics for Packaging

Wolfgang Mildner of PolyIC described where his company is focusing their application efforts in printed polymer electronics – auto identification, displays and smart objects – these he referred to as the three “dream fields”. All three can be achieved today using silicon technology but not cost effectively. Printed electronics will lead to flexi-

ble, low cost and mass produced disposable devices of low complexity (i.e. from 1 – 2500 transistors rather than 106). PolyIC have demonstrated the first organic RFID device operating at 125 kHz and their target is a 13.56MHz printed tag. Current efforts are concentrating on developing and optimising the high speed production process which does not use ink-jet printing.

There is much interest in printed chemical sensors, and some simple but interesting devices can be produced in the laboratory, according to Bruce Kahn of Rochester Institute of Technology. He described the gaseous response of a silver ink/polyaniline structure deposited on PET as measured by the resistance changes that took place when the device was exposed to a wide range of common gases, such as ammonia, water vapour, acetic acid, hydrochloric acid, ethanol and methanol. The device was particularly sensitive to ammonia, leading to the suggestion that it could be used as a quality tool to monitor the freshness of fish. One disadvantage of these structures is that they are sensitive to just about everything making discrimination between various gases difficult.

Anti-counterfeiting and Supply Chain Intelligence

Carolyn Burns of DuPont Security

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Highlights of IDTechEx/PIRA Conference (continued)

Solutions reviewed the global problem of counterfeiting and outlined the technologies available and the strategy and steps to finding a solution and then measuring the results. More specific solutions in the Hewlett-Packard company were described by Steve Simske. Recent initiatives in printing deterrents have been focussed on introducing structured variability, for example in line widths, thicknesses, numbers or barcodes. Dynamic deterrents raise the bar for the counterfeiter and can be easily changed and adjusted to keep the counterfeiter guessing. It has been stated by the FDA that mass serialisation to uniquely identify all drug products intended for use in the USA is the single most powerful tool available to secure the US drug supply.

Paul Schmidt of Accenture considered supply chain intelligence and looked at readiness, the timeframe set by the leaders and some of the results of the "JumpstartRelease1" pilot programme. The world's 3rd largest retailer, UK's Tesco was more coy on the details of its RFID efforts although admits to have been monitoring RFID for the past 10 years. Overall, Tesco is very positive about RFID at pallet, case and item level. "Three of the world's four top retailers are pushing the same agenda". "It is as important as barcodes were when they first arrived." Simon Palinkas emphasised that what drives Tesco is the size of the benefits that can be achieved and not

the technology, which is merely an enabler. RFID technology works today but is not cost-effective. (Nonetheless, Tesco has just committed to about \$8 million of pallet/case readers) Better for customers, simpler for staff, and cheaper for Tesco are the three key criteria against which the technology is being judged. One example of Tesco thinking – RFID has been translated into plain language within the company as "radio barcodes" – simple, unthreatening and easier for non-technical people to understand. Simon welcomed others who wished to use the term, and as one wit in the audience remarked "it's better than RFID because you can't spell "afraid" without using R, F, I and D!" Tesco is keen to get temperature monitoring RFID not just pallet, case and item level and to establish customers' views of privacy rather than those of strident privacy advocates. It is doing studies of these. He emphasised that, contrary to reports, Tesco has never issued any mandates and its projection for tag purchases this year is a maximum of 20 million and then only if the infrastructure works.

Gillette, through their Director of Technology – AutoID, Jamshed Dubash, presented a wide range of important data regarding RFID readability as a function of product type and packaging materials and construction, and sharing some of the production tricks that can improve readability – such as reading

pallets at the shrink wrap station where they are naturally rotated. Unfortunately due to a late senior management decision within his company, much of this important data was unavailable in hard copy form at the conference, leaving the audience scrambling to record any nuggets they could as the slides flashed up.

Some elements were:

- The Gillette RFID program is modest so far
- Tags dead on arrival are now below 1%
- Because it is difficult or impossible to get UHF reading of tags and pallets that is 100% perfect, Gillette is looking closely at getting 100% data verification
- Packaging will play a very critical role in getting UHF systems satisfactory. RFID friendly packaging is the new emphasis
- Gillette is doing no item level work at present (like Tesco and Abbott Laboratories reported at the conference) because the pallet/case problems must be overcome as top priority

Consumer Interaction and Enhanced Functionality

Gerald Darsch, Director of Combat Feeding, US Army, described the capability driven packaging systems that have and are being developed

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Highlights of IDTechEx/PIRA Conference (continued)

for the modern warfighter. In his unit, some of the most innovative smart packaging systems are under development but set against military specifications that can be very different to those in the commercial sector, for example, three year shelf-lives at 80°F, and the ability to withstand being dropped out of aircraft without damage! In his own inimitable style, Gerald described some of the latest packaging initiatives, such as the drive to replace aluminium foil in packaging with polymeric films containing nanoclays for barrier protection, to permit a wider use of microwave sterilisation (RF friendly too!). A further important technical programme concerns pack-

aging weight reduction, where the goal is a 20% reduction, allowing more equipment and personnel to be transported and also importantly, the creation of less waste material. Novel nutrient delivery systems, such as transdermal delivery via skin patches of curcumin, muscadine etc to enhance cognitive and physical performance such as helping recovery from muscle fatigue and boosting muscle action, self-hydrating membrane pouches and olfactory ration packaging were also introduced - technologies at the cutting-edge of smart packaging systems. The smart shipment/ delivery package may be an electrical skin patch that fluidises

the lipid layer to make drugs etc penetrate faster.

Projects include:

- Ration Packaging Material & Systems for MREs (Pliant)
- Multifunctional Protective Packaging Technology (Appleton)
- Testing Services Agreements (Avery Denison, U.S. Air Force)
- Environmental Quality Basic Research (EQBR)
- Strategic Environmental Research and Development Program (SERDP)
- Environmental Quality Technology Program (Base Camp Solid

Combat Feeding Packaging Requirements



**Acceptance, Nutrition, Wholesomeness,
Producibility, Sanitation, Cost, Safety,
Fuel Efficiency**



Shelf Life
Maintainability
Boredom
Battlefield Fuel
Self Heating
Transportability
Modularity
Energy Consumption

Universal Acceptance
Air Delivery
Mobility
Weight/Cube
NBC Threats
Performance Enhancement
Reliability
World Wide Environments

Department of Defense

COMBAT FEEDING

Continued >>

Highlights of IDTechEx/PIRA Conference (continued)

Waste Elimination)

- Navy's Waste Reduction Afloat Protects Seas (WRAPS)

Potential weight saving from more efficient packaging of food would have been equivalent to shipping 36 main battle tanks in a recent campaign!

The various technologies for creating self-heating and self-cooling packaging, examples of what are available commercially today and what future developments would seem most likely to happen over the next 3-5 years, were presented by Paul Butler of Oxford University and IDTechEx. The conclusions were that self-heating containers look set to take off with exciting new product launches of gourmet lattes in the USA and direct-steam injection in the UK. By contrast self-cooling is a little slower but showing steady commercial progress. It was pointed out that the rewards for getting self-cooling right could be considerable, just in canned beverages alone. For example, the global beverage can

market is estimated to be approximately 400 billion pieces per year and is projected to grow about 10 percent every year. The market penetration of a self-cooling can might eventually reach about 5% of total can consumption while the unit price of the self-cooling can is expected to fall to around 20-25 cents. If this happens, world market share of the self-cooling can will be 20 billion cans per year and amount to ~US\$3.5 billion per year.

Smart packaging technology, and the development of film-based oxygen scavengers, is helping to create a new product category - Flexplay limited-play DVDs - and expand the distribution channels for these home entertainment products, according to Thomas Kennedy of Sealed Air Corporation. Once a consumer removes the DVD from its airtight package, he or she can view or play it for about 48 hours, after which time oxygen degrades the DVD, making it change colour from red to unplayable black and signalling its

“expiration.” Vacuum packaging, combined with Cryovac's oxygen-scavenging (OS) film, ensures product integrity over a one-year shelf life for unopened packages. The film removes residual oxygen inside the package to parts per million levels within a few days of packaging, preventing the product from deteriorating during handling and storage.

Timing the expiration of food products through colour change chemistry is also at the heart of the Timestrip® system described by Reuben Isbitsky. It indicates just time elapsed but can be made temperature sensitive as well if required. This label technology is customer activated and relies on the capillary action of food grade coloured liquids as they wick along a porous substrate. Both refrigerator and freezer variants are commercially available. The label system has been tested on perishable food products as well as eye drops, water filters and toothbrushes, but it is in the food service industry, with impending legislation with respect to the labelling and recording of food ensuring appropriate stock usage and rotation, that this technology is most likely to find initial early adoption. It will soon be sold for 99p per ten pack.



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Highlights of IDTechEx/PIRA Conference (continued)

Smart and Intelligent Packaging in the Pharmaceutical Supply Chain

Paul Adams of Abbott Laboratories summarised the results of an RFID Accenture pilot trial with Wal-Mart using UHF Matrics Pharma tags. There was a long lead time for the supply of tags and the initial quality was low. For item level tagging, costs were too high, tag availability was poor and tag sizes were sometimes too large for small pharmaceutical vials. Despite these problems, the important point made was that pilot trials at item level are essential for your particular product and set of circumstances in order to establish what the real problems are.

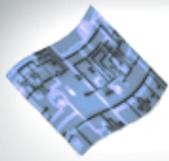
Michael Bergey of Cardinal Health returned to the subject of counterfeiting of pharmaceutical products. Authenticity and track and trace are complementary functions. Authentication starts with security centric approaches to packaging design that consist of patented/hard to duplicate designs combined with tamper evident features and incorporate the use of smart materials. RFID track and trace can then be added at the point of manufacture and/or packaging and used throughout the distribution system, to create a layered approach. According to Tom Grinnan of MeadWestvaco, smart packaging can deter the counterfeiter but it can also help create better patient compliance, and this can produce a rare win-win for patients, drug companies and the health care providers.

See the separate article on this. The financial costs of non-compliance are great, but the patient factors are equally disturbing – patients are confused over the reason for a particular medication, they are not convinced medication is necessary, and many discontinue a medication prematurely and fail to refill. Compliance packaging is moving rapidly to incorporate electronic functionality, and Aardex, Medic, Bang & Olufsen, GSK and MeadWestvaco have commercial products either in the market or close to market launch. Cerepak™ is the MeadWestvaco offering using licensed Cypak technology, which is made up of heat-sealed paperboard cards with printed conductive ink circuitry, an electronic module or computer chip sealed within the package, and RF uploads to a PC database (or directly to Internet-based software) via a mouse pad-like reader. This pack is capable of recording the time and date of the removal of medication from the package, in addition to the specific pill location on the package (e.g. Day One evening tablet).

Material and Design Issues

The future material challenges for smart packaging and the increasing importance of design in helping packaging brand owners achieve a competitive edge were considered by Gaylon White of Eastman Chemical Company and Mark Shickle of The Brewery. The better communication

and cooperation there is between the material and design worlds, the more likely it is that materials technology will become an enabler rather than a dictator of the final finished packaging. Smart packaging is a new tool that can enhance the emotional message at the heart of all great brands, offering an opportunity for brand owners to redefine their brand propositions. Steve Kelsey of Pi3 Design picked up the structural design theme as it applies to working with great brands, and outlined the data driven design philosophy surrounding the key question “What do consumers want and how could smart packs deliver?” A large amount of data had been condensed down into three core overall experiences that were largely unmet at present and where smart packaging might usefully be applied. These were customisation (everyone is a VP); effortlessness (reward the consumers efforts); and best value (make the intangibles pay). The implications of these drivers in both the retail environment, and for brands, were then considered in an inspirational series of final graphic images.



**Printed
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products of the future**

**19-20 April, 2005
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- * Displays (the full range)
- * Materials (conductors, semiconductors, substrates)
- * Manufacturing techniques (reel to reel, printing, spin coating etc)

The advent of low-cost disposable technologies provides opportunities to develop products that will change our lives, not simply adding novelty features, but improving the user interface to provide products that are more intuitive, safer and fun to use.

Early case studies are covered, as are potential markets and needs by potential users. Applications covered include electronic smart packaging, such as the changing use by date on packaging, sensors on drugs and foods, brand enhancements, signage and large area displays, photovoltaics, RFID, merchandising, healthcare applications etc.

Global companies will discuss their technical developments and progress, some with first announcements.

Whether it's flexible displays, electronic inks, organic electronics, low-cost laminar batteries, sensors, or circuits - over the course of our conference we will update you on the current status of the fast-moving world of printed electronic technologies, and explore future applications.

Our conference presenters are at the forefront of technology development, as well end-user brand owners - companies looking to enhance and protect their brands in future.

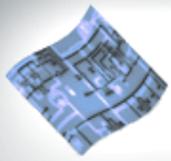
The event is being held in Cambridge, UK, close to many companies involved in the topic. Tours are conducted as part of the event to some of these companies.

Keep up to date on Printed Electronics news and reviews :
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**Printed
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Speakers

The following speakers are presenting at Printed Electronics 2005. Please refer back to this page in the coming weeks for the evolving agenda.

Keynote presentation:

Prof. Richard Friend, Cavendish Laboratories, The University of Cambridge, UK

Prof. Friend is the key founder of both Cambridge Display Technology and Plastic Logic. He will give an overview of his most recent work and comment on the industry so far.

- Dr Tommi Remonen, Interconnect & Packaging Dev Engineer, **ACREO, Sweden**
- Dr Louis Bollens, **AGFA, USA**
- Rebecca Feay, Commercial Manager, **Avecia, UK**
- Chuck Edwards, General Manager, **Printable Electronics and Displays, Cabot Superior MicroPowders, USA**
- Craig Cruickshank, Managing Director, **cintelliq, UK**
- Stina Ehrensvar, Marketing Director, **Cypak AB, Sweden**
- Nigel Rix, Commercial Director, **Episys, UK**
- Dr Thomas Kugler, **Epson (UK) Ltd, Japan**
- Richard Kirk, Managing Director, **elumin8, UK**
- Dr Karlheinz Bock, **Fraunhofer Institute, Germany**
- Dr Peter Harrop, Chairman, **IDTechEx, UK**
- Dr Jack Bacon, Johnson Space Center, **NASA, USA**
- Thomas R. Grinnan, **MeadWestVaco Corp, USA**
- Dr Maxim Shkunov, **Merck Chemicals, UK**
- Seppo Pienimaa, Senior Research Manager, **Nokia, Finland**
- Geoff Boyd, Head of Technical Sales, **NXT Sound, UK**
- Professor John Wager, **School of EECS, Oregon State University, USA**
- Bill Wilson, **Outdoor Advertising Association, UK**
- Jukka Perento, Managing Director, **Panipol, Finland**
- Chris Barnado, Creative and New Business Director, **Pelikon, UK**
- **Plastic Logic, UK**
- Dr Bruce Kahn, Assistant Professor, **Rochester Institute of Technology, USA**
- Luigi Occhipinti, **STMicroelectronics, Italy**
- Jamie Neilson, **XINK, Canada**

The IDTechEx Reports

Smart Packaging Reports

Smart Packaging

Introductory report on the whole subject. Needs, applications and technologies for smart packaging whether consumer, postal, military, healthcare or other. 350 organisations are covered.



Electronic Smart Packaging

This report is an in-depth study of electronic smart packaging, the hottest sector. Forecasts to 2015.



Consumer Smart Packaging

Smart packaging brings additional useful and valuable benefits to the consumer. This book focuses on documenting, understanding and describing how unmet consumer needs can be satisfied by smarter consumer packaging, with specific chapters of the food, beverage, household products and health, beauty and personal care market sectors.



Printed Electronics Reports

Printed Electronics

Printed electronics is a term that encompasses much more than the long awaited commercialisation of thin film transistor circuits TFTCs and organic light emitting diode displays. Both will reach their greatest potential when we can print them on common packaging material. TFTCs will be more robust and lower in cost than silicon chips so they will appear everywhere from singing gift cards to smart medical packaging and moving colour pictures in electronic books. However, those devices are only a part of what is going on...



Application Specific Reports

Smart Tagging and Smart Packaging in Healthcare

This report analyses how smart technologies will be used to resolve the enormous challenges in the healthcare industry. RFID, printed electronics and smart responsive materials can be used to reduce costs, errors, crime, deaths and sickness, and provide new earning streams, intellectual property, brand enhancements and market intelligence in healthcare.



Livestock and Food Traceability

Strict new legislation on food traceability is largely driven by recent outbreaks of diseases such as mad-cow disease, foot-and-mouth disease and avian flu. However, consumers also demand more information, as do the police and customs. This report analyses the use of DNA, RFID and other technologies.



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The IDTechEx Reports

RFID and Smart Label Reports

Smart Label Revolution

Introduction to the subject. The one stop guide to chip and chipless technologies, markets, standards, statistics, trends, lessons of success and failures. Forecasts given. Japanese version available new for 2004!



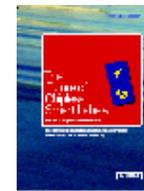
RFID Forecasts, Players and Opportunities

This essential report analyses the rapidly growing and diversifying market for Radio Frequency Identification RFID for 2005-2015. In 2005, more RFID tags will be sold than in the previous 60 years since their invention. Primarily this will be because retailers and governments are demanding that suppliers fit tags to pallets and cases to save cost and improve service but many other applications will be growing very rapidly.



Future of Chipless Smart Labels

This report analyses how the silicon chip and even batteries in RFID will become printed, to lower cost and improve ruggedness so that most forms of low cost RFID can become "chipless"



Item Level RFID

This report details the business benefits of the "tag everything" scenario and explains the imminent transformation of postal, military, healthcare and other operations.



Active RFID and its Big Future

Active RFID is little reported, but its use is growing rapidly. Several applications have been above \$100 million. It is responsible for over 20% of all spend on RFID. Learn how to use it and how to sell it. Forecasts to 2015



Thirty RFID Case Studies in Retail

This covers retail and the Consumer Packaged Goods (CPG) supply chain. Introduction. Thirty detailed studies from across the world. Jargon buster appendix



Thirty RFID Case Studies in Logistics

This has an introduction and thirty detailed case studies on RFID in the logistics industry, e.g. freight tagging, driver access, condition monitoring, tachometer card. Jargon buster appendix



Thirty RFID Case Studies in Healthcare

This has an introduction and thirty detailed case studies on RFID in the healthcare industry, this includes drug and blood tagging, hospital security, as well as patient safety and error prevention. Jargon buster appendix



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IDTechEx Reports Price List February 2005

The Smart Label Revolution; RFID Forecasts, Players and Opportunities; The Future of Chipless Smart Labels; Printed Electronics; Electronic Smart Packaging

	Hardcopy	Electronic	Hardcopy & Electronic
GBP (£)	£800	£1,000	£1,200
Eur (€)	€1,200	€1,500	€1,800
USD (\$)	\$1,500	\$1,800	\$2,200

Item Level RFID; Smart Tagging and Smart Packaging in Healthcare; Smart Packaging; Livestock and Food Traceability; Electric Vehicle Market Statistics

	Hardcopy	Electronic	Hardcopy & Electronic
GBP (£)	£1,200	£1,500	£1,600
Eur (€)	€1,800	€2,250	€2,400
USD (\$)	\$2,200	\$2,800	\$3,000

Active RFID and its Big Future, Short Range Wireless – Ebook only

		Electronic	
GBP (£)		£500	
Eur (€)		€750	
USD (\$)		\$1,000	

Consumer Smart Packaging

	Hardcopy	Electronic	Hardcopy & Electronic
GBP (£)	£650	£650	£800
Eur (€)	€1,000	€1,000	€1,200
USD (\$)	\$1,250	\$1,250	\$1,500

30 RFID Retail Case Studies; 30 RFID Logistics Case Studies 30 RFID Healthcare Case Studies

	Hardcopy	Electronic	Hardcopy & Electronic
GBP (£)	£400	£300	£450
Eur (€)	€600	€450	€675
USD (\$)	\$750	\$600	\$850

Subscription Services

	Smart Labels Analyst	Smart Packaging Journal	Knowledgebase
GBP (£)	£250	£250	£1,500
Eur (€)	€375	€375	€2,250
USD (\$)	\$500	\$500	\$2,800

RFID Knowledgebase sections – Electronic only

		Electronic	
GBP (£)		£400	
Eur (€)		€600	
USD (\$)		\$750	

IDTechEx Consultancy

Introduction

At IDTechEx we aim to help everyone in the RFID smart labels and smart packaging value chains from inventors and venture capitalists to value added suppliers, system integrators, major users and facilities managers. We do not compete with these businesses.

We endeavour to be particularly well informed about smart labels and appropriate enabling technologies and unusually rapid in our response to customer's requirements and work hard to "see the future". IDTechEx sponsor relevant academic and not-for-profit organisations to support the industry and this also enables us to provide our clients with the latest knowledge which they may not have access to. For example, we are sponsors of EP-Cglobal, SAL-C (Smart Active Labels Consortium), Ubiquitous Computing (Japan) and active members of Euro-Tag. IDTechEx is also a member of AIM, IEE and the Institute of Packaging. This support does not, however, conflict with our strict independence.

We are unusually global in our reach. Our staff includes native foreign speakers and we regularly visit companies and conferences across the whole world, as well as holding our own conferences in the US, Europe and Japan. . In the last six months, we have provided consultancy services in Europe, the USA, Japan and Korea.

Recent successes

- Teach-ins and brainstorming of strategy at Amsterdam Schiphol Airport, Shell oil company, a major food manufacturer, clothing retailers and a microchip manufacturer*
- Internal training courses on RFID and smart packaging in the US and UK for a major packaging company*
- Assessing optimal technologies and materials for ultra low-cost smart labels of various types and business plans for such products for various companies*
- Assistance with strategy of a security printer*
- Business due diligence of a planned acquisition for a US multinational* and similar work for two venture capitalists* planning certain investments. Recent work includes business due diligence for PolyTechnos of Munich, Germany for investment in Plastic Logic, UK.
- Helping start-ups* in France, UK and the US.

Contact us

Should you require advice on RFID or smart packaging, please contact us. We will sign an NDA (Non-Disclosure-Agreement) as necessary in order to help you and your company.

Please email consultancy@idtechex.com

* Much of the consultancy carried out by IDTechEx is under Non-Disclosure-Agreements (NDA), therefore names of many of our clients cannot be revealed

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