

RADIO FREQUENCY IDENTIFICATION TECHNOLOGY (RFID)

THE REALITY BEYOND THE HYPE UPDATE ON DEVELOPMENTS

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6 months ago.....

- What is RFID?
- Benefits
- Business case for RFID
- Case studies of successful implementation
- Factors limiting RFID uptake

.....concluding with the need to overcome barriers to adoption.

6 months on.....

**RFID is no longer an 'imminent' or
'emergent' issue. It is now a
'heartland' issue.**



Revisiting the barriers to adoption

1. Costs

- Full benefit through integrated systems.
- Cost of hardware, installation, integration and training.

2. Use of different radio frequencies – Europe, USA and Japan.

- 125KHz, 12.56 MHz, 800-900 MHz, 2.45 GHz.

3. EU Directive on Waste, Electrical & Electronic Equipment (WEEE) – (2002/96/EC as amended by Directive 2003/108/EC)

4. RFID and data protection



The Business Case for RFID

Integration in the logistics supply chain has:

- Increasing product availability
- Lower total operational costs
- Improving capital utilisation
- Enhanced safety and quality control



Successful implementation

- Pioneered in the retail industry
- Tesco & Marks & Spencer

- Adopted in the manufacturing sector
- Brewing Industry

- Being applied in the Service sector
- London Underground, the NHS.



CS1 – Marks & Spencer

- Using RFID to drive efficiency in the supply chain.
- 2 separate business units:
- Food: Autumn 2002 – 3.5 million reusable food trays tagged.
- Clothing: Right goods, right time, right place. Item level trials on clothing.

CS2 - TrenStar™

- Buy and manage mobile assets
- Organisation can focus on business
- Industry losses £24 million per annum
- 2002 Scottish Courage and Carlsberg-Tetley
- 2004 Coors
- The containers:
 - Valuable reusable asset
 - 15+ years life expectancy
 - Arduous environment

CS3 Pharmaceuticals

PA Consulting

- Effect on brand and depress share price
- Authentication of pharmaceuticals at the point of sale.

Forrester (research)

- Texas Instruments (TI), 3M and Verisign focusing on authentication of drug supply.



CS4 – English NHS

- Improve supply chain efficiency
- Reduce patient risk
- Tracking and traceability



So on costs.....

- YOU decide whether there are tangible benefits for your company



Radio Frequencies

- The European Conference of Communications and Postal Administrations (CEPT) recommendation taken up by Ofcom (www.ofcom.org.uk)
- Ofcom consultation proposal:
- Spectrum 865-868 MHz made available to the RFID community on a licence-exempt basis.

The WEEE Directives

- UK DTI has delayed the implementation of the Directive's producer responsibility and retailer take-back obligations from January 2006 until June 2006.
- RFID Tags will be subject to the Directive
- Part of the waste management solution



RFID and Data Protection

- UK Data Protection Act 1998 prevents the linking of RFID information with individuals without their express consent.
- In the USA, RFID is regulated under Part 15 of the Federal Communications Commission (FCC) for low-power devices.

The future of RFID

- Barcoding has been around 25+ years.
- RFID is proving too have a shorter development cycle.
- Impact of RFID on supply chain networks will increase as part of a more integrated use of technology and increased business efficiency and effectiveness
- Barriers to adoption remain, but they are being overcome



Your Questions?

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