

## e-Business W@tch Workshop

### Perspectives and Impacts of RFID Penetration in European Enterprises

## 1 Summary

### Background

The Sectoral e-Business Watch (SeBW) Workshop on "Perspectives and Impacts of RFID adoption in European Supply Chains" was held in cooperation with IDC as part of the "Next Generation Supply Chain Summit" on October 23, 2007, in Milan.

The main objective of the workshop was to discuss and validate the findings of the e-Business W@tch interim sector report on the state of play in RFID adoption and its benefits/problems for firms. Feedback and comments received from conference participants will be reflected in the final report. The final report with all survey results and case studies is expected for March 2008.

The workshop, which achieved a good level of participation (approximately 180 participants), was co-chaired by Gabriella Cattaneo, IDC EMEA, director of the Competitiveness and Innovation Expertise Centre, and Ivano Ortis, EMEA research director, Global Retail Insights (an IDC company), and author of the SeBW study on RFID.

### Programme

The SeBW session took place in the afternoon and was introduced by **Hasan Alkas** (EC, DG ENTR, SeBW programme manager). He outlined the e-business policy framework of DG Enterprise & Industry and explained the background and role of SeBW in this framework.

Among the key considerations made, it emerged that EC/DG ENTR is committed to driving material productivity improvement opportunities for European enterprises. "This is why we decided to investigate RFID-driven business growth potential in more detail with dedicated research on this topic," said Alkas.

Results of the SeBW study on RFID were then presented by **Ivano Ortis**, who summarised preliminary conclusions from this year's work.

**Kim Knickle** (programme director, IDC Manufacturing Insights US) provided a general overview of ROI opportunities and best practices for RFID in supply chain-intensive enterprises. **Elena Sini**, CIO of Fondazione IRCCS Istituto Nazionale dei Tumori, Italy, presented a case study about the use of RFID in the healthcare sector.

After the presentations, a panel (consisting of Antonio Lasi, General Manager, Lombardia Informatica; Elena Sini, CIO Fondazione IRCCS Istituto Nazionale dei Tumori; Marie Zitkova, Head of Auto ID Services, SITA Switzerland; Glenn Exton, EMEA Retail VP of the MDI supply chain and distribution group at HP US; Kim Knickle, program director, IDC Manufacturing Insights US) engaged in a lively discussion, raising several issues such as different implications, drivers and barriers of RFID adoption.

## 2 Main Points Presented and Discussed

### State of Adoption of RFID Technology

After a presentation of the RFID study objectives (get an up-to-date picture of the state-of-play, assess the strategic importance of this technology for competitiveness of firms in Europe and identify issues that could be relevant for policy) Ivano Ortis points out that RFID is no longer an over-hyped technology (as it was two years ago), as many organisations, especially in manufacturing and transportation, are already implementing or piloting it. The overall figure approximates a 20% initial penetration of RFID into the Western European enterprise market.

### How to Address the Critical Issues That Must be Considered

According to preliminary findings, critical issues that are slowing RFID penetration in the EU are:

- The availability of global standards
- Other barriers, such as privacy regulations; the need to reduce the risks/impact of security breaches; the need to balance automation for increased efficiency with "trustworthy" governance practices. Also, to mitigate health risks/concerns, the need to balance read efficacy with exposure levels.

In our research, however, we have identified the following key factors as instrumental tools to maximise RFID investment return:

- Technological solutions or advanced features are available to help overcome some of the issues that need to be addressed (for example multi-frequency and multi-format capable tags and readers until standard acceptance is complete)
- Open, repeated and consistent communication of policies/usage of RFID-collected data to consumers, patients and citizens is fundamental to mitigate privacy concerns
- Value collaboration excellence is found to be a recurring theme to optimise benefits, reduce risks and thus maximise the overall ROI

### RFID trends and anticipated developments

According to Ivano Ortis, there is momentum for investment in 2008, as RFID will be used not only in the supply chain but also more generally to optimise business processes and drive intelligent decisions through the more efficient collection of data and more effectively use of the data in flexible ICT infrastructure environments.

Presenting the results of an IDC survey carried out in the manufacturing industry regarding the adoption of RFID (at a worldwide level), Kim Knickle pointed out that RFID is still in early stages, but enthusiasm is high and spending continues to climb.

Asset management is the most common objective for RFID projects, while current perceived benefits are:

- Compliance with customer mandates
- Reduced labour costs
- Reduced inventory

For the future, IDC expects the rise of improved customer services, both in the private and public sectors, as a driver for enterprises to implement RFID-based business process automation platforms.

## Recommendations Resulting From Research and Practical Experience

Kim Knickle remarked that to get good results it is very important to be practical in RFID implementations. As the predicted broad adoption of the RFID technology will not occur until total RFID project costs (including also services) decrease or become more predictable, or supply chain captains share risks and rewards, in the meantime good practices in industry are to:

- Tag mobile physical assets
- Adopt internal policies to make RF-friendly purchases of capital assets
- Identify problems where barcodes are not enough — and RFID may produce better results
- Consider technology standards as a moving target, with business process improvement as the real measure of success
- Don't blame the standards too much and put the burden of ROI on the vendor

Elena Sini, presenting her experience at the Istituto Nazionale dei Tumori (which is both a scientific research and health institution specialised in cancer treatments), explained that RFID technology has been seen as the unique possible response to the problem of achieving, in the transfusion process, benefits such as:

- Total unit traceability (RFID tags on blood bags)
- Process performance monitoring
- Timely and complete communication within the organisation

The project, which in future will be enlarged to gain broader objectives, has brought many results, some not measurable, such as the better patient experience, but some that can be quantified, such as the return of information, the entire traceability of the process, the reduction of errors, and consequently cost savings (as the value of non-transfused/returned blood bags is very high).

## 3 Conclusions

Panel participants engaged in a lively discussion with IDC analysts. In particular, the following issues were discussed:

- The technology, which is characterised as being low-level intrusive or in some cases not intrusive at all, has been demonstrated to be very useful in enabling new solutions. We are at the point of mainstream application. In some cases, they are the only solutions that can provide some form of "glue" or integration layer between different departmental IT solutions.
- For some reasons (the standards evolution still undergoing, the declining of prices, the need to pilot it first) in the past it was not very much used: today, the expectations are not to have it everywhere, but where it can optimise process execution.
- In the future, the problem will be more how to use all the information that can result from an RFID implementation. This will require advancements in the area of demand intelligence strategies and business intelligence more generally. Openness in knowledge sharing will be instrumental in driving RFID-project outcomes.
- Also, there will be more demand from individuals, which will drive those projects, for example the concrete opportunity for enterprises and public institutions to drive next-level improvements in the "people" experience. Technology vendors have to focus on building business cases to provide business solutions to their customers (not demonstrating RFID alone but "improved inventory visibility" or "cycle time reduction"), while discriminating between different industry-related pain points. The objective of RFID in the enterprise is to drive value through network collaboration excellence.

## 4 Further information

Further information, including the agenda and proceedings, are available at the Sectoral e-Business Watch Web site ([www.ebusiness-watch.org](http://www.ebusiness-watch.org)) in the "eBiz Events" section.

For specific questions and feed-back, please contact:

### **IDC Global Retail Insights**

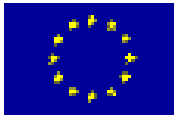
Dr. Ivano Ortis

EMEA Research Director

Viale Monza 14, 20127 Milano

Tel. +39 02 28457 - 1

Email: [iortis@idc.com](mailto:iortis@idc.com)



### **About the Sectoral e-Business W@tch**

The "Sectoral e-Business Watch" ([www.ebusiness-watch.org](http://www.ebusiness-watch.org)) is based on a Framework Contract (No. ENTR/2006-019) and Specific Contract (No. SI2.451854) between the European Commission, Enterprise and Industry Directorate General, and empirica GmbH. The implementation of the contract involves, besides empirica GmbH, the following main service providers: Altran Group, Databank, DIW Berlin, GOPA-Cartermill, IDC EMEA, Ipsos GmbH and Rambøll Management.

Contact: [info \(at\) ebusiness-watch.org](mailto:info(at)ebusiness-watch.org)

Imprint: empirica GmbH, Oxfordstr. 2, 53111 Bonn, Germany; Tel. (+49) 228 – 98530-0;

e-Mail: [info \(at\) empirica.com](mailto:info(at)empirica.com)