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## RFID consulting

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### **Mieloo & Alexander Business Integrators**

Mieloo & Alexander Business Integrators is a consulting firm specialising in technology enabled business improvement. We successfully design, plan and implement solutions and transform your organisation to achieve sustainable competitive advantage.

We have years of experience, in-depth knowledge of your business and technology and a true hands-on, get it done mentality that has resulted in strong and lasting client relationships.

The professionals working out of our Rotterdam office on projects across Europe deliver outstanding client service, measurable results and satisfied customers.

### **A Revolution in the Making**

Radio Frequency Identification (RFID) technology provides, in combination with the Electronic Product Code (EPC), wireless identification and tracking potential that dwarfs that of the traditional barcode.

At Mieloo & Alexander we believe that RFID/EPC has the potential to significantly improve supply chain management efficiency, through reduction of labour costs, increased inventory velocity, advanced supply chain communication and improved market and customer intelligence.

### **Generating and Capturing Data**

At its core, RFID technology makes use of wireless and semi-conductor technology to identify and track items. A typical RFID system comprises a transponder tag (a semiconductor and a small antenna), tag programming equipment and a tag reader or scanner.

A tag is capable of storing significant amounts of data. When it passes within range of a reader it is detected and interrogated for its contents by a radio signal emitted by the scanner. The information on the tag may include item number, current location, physical status, etc.

A network of RFID readers and tags generates a massive amount of real-time data. This challenges our clients not just to capture the data flow, but also to filter the relevant data for use by business applications like warehouse management, enterprise resource planning, order management and supply chain planning systems.

Middleware (Savant™) accommodates these needs. In particular it:

- Commissions tags;
- Manages data collection technologies (barcode and RFID tags);
- Captures, filters and processes data between readers and associates data with pallet/carton/item information;
- Delivers critical, real-time business event related data to internal and external business applications.

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### **Speeding up Adoption**

RFID technology has been available for two decades. So why is it now being adopted at an exponential pace?

- Standardisation – With the Electronic Product Code a global standard supported by a global standardisation organisation is now available. For Europe, the new frequency standard (868 MHz, expected to be ratified by the European Commission in the summer of 2004) makes RFID a viable technology for application in the supply chain.
- Market forces – Wal-Mart and the Department of Defence in the USA have issued mandates requiring their suppliers to become RFID and EPC compliant by 2005 and 2006 respectively. Similar initiatives are being deployed in Europe, where the UK is leading.
- Rapidly decreasing cost of technology – The cost of RFID tags is expected to drop rapidly due to economies of scale and improved manufacturing processes.
- Improved quality – A number of technology vendors have now managed to achieve the hit rate and reading speed required for supply chain solutions at acceptable cost.

### **Our Vision on RFID**

Mieloo & Alexander expects that the widespread adoption of RFID technology will occur in 4 stages:

- Stage 1: until early 2005, tags will be embedded in barcode labels and companies will invest in RFID pilots to discover and assess its potential.
- Stage 2: increasing number of full scale roll-outs, with (embedded) tags at pallet and case level and further assessment of possibilities to utilise the 32 bit user defined code of the EPC.
- Stage 3: experimental use of RFID at item level, utilising full use of the EPC code.
- Stage 4: widespread item tagging and full use of EPC, placing huge demands on the capability of the IT infrastructure to store, manage and interpret the massive data volumes associated with this stage.

### **Creating Value out of RFID**

Mieloo & Alexander's service portfolio comprises three essential skills to support companies in their endeavours to adopt RFID/EPC technology:

- Technology consultants
- SCM and CRM Business and technology consultants
- Project and change management

While RFID/EPC is yet to be embraced by most companies, we are already engaged in unique partnerships with leading technology vendors, giving our technology consultants a decisive edge over other consultancies. In addition, our astute (technical) project managers and energetic change managers will assume ownership to make your implementation a lasting success.

### **Long-lasting Client Relationships**

Mieloo & Alexander works for a variety of multinational clients on projects across Europe. Our business and technology consultants were already engaged in several business cases where our RFID/EPC value model allows clients to assess the ROI of RFID.

For further inquiries, references or a more detailed description of our services, clients and case studies, please visit us at [www.mielooandalexander.com](http://www.mielooandalexander.com) or contact us at [info@mielooandalexander.com](mailto:info@mielooandalexander.com).