

## RFID, a mature technology in a varying industry

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Although nobody talked about it until recently, RFDI technology has been up and running for years. In fact, since 1994 the US Defence Department (DOD) has been using this wireless product identification technology to track its shipping containers, cutting down the number of containers required by 90%.

In 2001 GAP, the American apparel firm, started a pilot program designed to improve the efficiency of its value supply chain. The company included a tag in its products enabling it to know the situation of a product at any time thanks to RFDI technology.

With such features, RFID promises to revolutionize the distribution industry. Not only does it offer numerous advantages to retail chains (enhancing stock management and real time accountability, among others) but it can also ease the user shopping experience (RFID is able to read up to 200 tags per second, which should allow it to calculate the total cost of products in a shopping trolley in a flash).

However, there are still many barriers to the deployment of this technology. The bet of big software and hardware players –such as Microsoft, Intel or SAP-, together with the interest of big retailers –such as Wal Mart in the USA or Metro in Germany – is a first big step.

There's no doubt that the distribution giants wield great power over their suppliers and that the latter will end up submitting to their demands. However, it still has to be seen who will assume the required investment for the adoption of RFID.

And this does not only mean the cost of adapting each shop to the new technology but also the spending involved in providing tags for each of the suppliers' products.

Although the price of tags has fallen significantly, it's still around €0,7. This means an important additional cost in certain products like soft drinks cans for instance.

Probably, for big retailers and vendors with important

### Highlights

**1** RFID (Radio Frequency Identification) is a technology of identification via radiofrequencies. It is a small circuit with an aerial, which, on the reception of energy via a radio frequency from an exterior transmitter, responds with a signal, indicating its state and position.

**2** Although RFID is already a mature technology, its deployment in the distribution world is linked to the introduction of the codification standard EPC (Electronic Product Code), which will enable the tracking and tracing of products as they pass from one partner to another in a supply chain.

**3** Metro, the German supermarket chain, Wal Mart the US retailer and the United States Department of Defence have asked their top suppliers to start using tags with this technology. For their part, companies such as Gillette or Procter & Gamble are experimenting with the use of RFID systems in stores to avoid shoplifting and to track the stock on their shelves.

**4** IDC estimates that RFID will generate €1.3 billion in 2008. Gartner forecasts that in 2007 all global transport carriers will have begun the systematic installation of industry-compliant RFID tags on 100% of their containers and a majority of leading consumer goods manufacturers will introduce RFID tags on loaded pallets that leave their plants.

technological infrastructure, such as Wal Mart and Procter&Gamble, the cost reduction in efficiency will amply compensate for the investment. However, there are still some players in the industry that restrict the electronic information sent to their billing departments. Bearing this in mind, we can say that the technology is ready to take off but the question is whether the retail and consumer industries are prepared for it.