

A Look Ahead

This will be another challenging year for RFID adopters. Here's how to make sense of what's happening.

By Mark Roberti

Jan. 3, 2005—A year ago, I wrote that the RFID industry had made great strides in 2003 but cautioned that there was still a lot of work to be done (see [A Year of Great Progress](#)). I'm tempted to reprint that column because the same is true now. When you look back at where we were one year ago, it's clear that tremendous strides have been made. And yes, there's still a lot that needs to be done.

The focus of many of the news stories published in 2004 has been on what has not been accomplished, rather than what has been. A lot of journalists and analysts seem to be judging the entire future of RFID on what percentage of tagged items are being sent to Wal-Mart distribution centers and on what read rates Wal-Mart might or might not be getting.

And much of the information reported is erroneous or misleading. A recent story in *The New York Times*, for example, said Wal-Mart stated the read rate in its stores was 60 percent. But the people I spoke to who are familiar with the Wal-Mart deployment say the read rate is far closer to 100 percent than to 60 percent. And not only are virtually all of Wal-Mart's top 100 suppliers tagging at least one product category, but another 37 suppliers have agreed to meet the company's tagging requirements voluntarily. Somehow, Wal-Mart's efforts are being portrayed as a failure in the media.

We need to get off the fixation with the number of Wal-Mart suppliers shipping tagged case and pallets and the number of SKUs they are tagging. Wal-Mart isn't the only company deploying RFID. Moreover, no one aware of the retailer's plans thought that on Jan. 1 all top 100 suppliers would be tagging all SKUs. Wal-Mart has always said this would be a phased implementation and that it would work with its suppliers. RFID is not an easy technology to deploy in open supply chains, where the company tagging can't control the conditions under which the tags are read. We should expect setbacks and problems.

Negative stories aren't necessarily bad. It's important for analysts and journalists to point out the technology's shortcomings and weaknesses. But journalists need to get their facts straight and understand the context of information they are providing. And analysts need to do a better job of commenting on current events.

One firm said recently that 50 percent of all RFID pilots would fail. What does that mean? Are we talking about closed-loop applications? Are we talking about slap-and-ship pilots to see if tags can be read? And what is the definition of success? Is it the ability to read 100 percent of tags on products shipped to a facility or a return on investment in 18 months?

So what progress has been made in the past year? Consider these facts:

1. Some 60 RFID vendors have agreed to support one global protocol, EPCglobal's Gen 2 protocol.

2. End users have found ways to tag many—but certainly not all—difficult products so that they can be read reliably when they reach a retailer's warehouse or store.
3. Hardware products are improving at a rapid clip, and software companies are developing new middleware products and applications that can take advantage of real-time data.
4. Infrastructure is being put in place to enable companies to make enough tags, labels and readers to meet demand (which won't be huge this year).
5. The Association for Automatic Identification and Mobility and CompTIA, a not-for-profit certification test provider, have taken the first steps toward creating an industry standard certification test.

But there is still a tremendous amount of work that needs to be done. On the standards front, it's important that EPCglobal resolve an issue involving eight bits of code that identify the source of data, so that Gen 2 can be submitted to the International Organization for Standardization and fast-tracked as an ISO standard. Tag makers need to improve the quality of their products and greatly reduce the number of defective tags they produce. And companies have to learn how to filter, manage and share real-time data

This will be another painful year of learning for both early adopters and RFID vendors. But end users should not have to sort through erroneous and misleading information to make smart decisions.

My advice: Don't get hung up on read rates or tag failure rates or how many suppliers are on-board with Wal-Mart. Look at the big picture. If RFID vendors fail to deliver better products, if tag failure rates remain stubbornly high, if EPCglobal doesn't submit Gen 2 to ISO, if no more retailers adopt RFID, then it's possible that the technology is a long way from widespread adoption. But if the industry makes progress on all of these issues, then it's a sign that RFID adoption is inevitable and will likely happen fairly quickly.

My guess is, this time next year I will be writing that 2005 was a challenging year—and that great progress that was made nonetheless. And if that's the case, then 2006 will be the year in which RFID begins to deliver early benefits and to be widely adopted.

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