

Will RFID Cross the Chasm in 2007?

Maybe, but even if it doesn't, you can expect significant progress as companies prove there is a return on investment from using passive UHF tags in the supply chain.

By Mark Roberti

Dec. 25, 2006—I mentioned in last week's column that the cost of radio frequency identification tags is not the impediment to adoption in the retail/consumer packaged goods supply chain, and that the real issue is return on investment (see [What's Holding Up Rapid Adoption of RFID?](#)). So when trying to determine when RFID will take off, one has to answer the question, when will companies achieve a significant ROI from tagging cases and pallets in their supply chain?

That's a very difficult question because there are many factors that have an impact on each company's ROI. Tag and interrogator prices are just one factor. Early adopters have largely addressed the physics issues around achieving reliable read rates, or found systems designs that enable them to capture the data they need. They have also analyzed the data and determined that there are significant benefits to be gained from tracking goods through the supply chain.

So we're standing at the edge of the chasm, to use a metaphor from the Internet heyday. To cross, companies need to put procedures in place to realize the benefits. I know for certain that at least a few companies are in the process of doing this, because some have agreed to tell their stories at [RFID Journal LIVE! 2007](#), our fifth annual conference and exhibition, being held April 30 to May 2, in Orlando, Fla.

The first applications that will deliver tangible benefits to CPG companies that have to absorb the cost of tagging goods are management of promotions and new product introductions (which boosts sales), electronic proof of delivery (which lowers invoice deductions) and improved shipping accuracy (which cuts down on charge backs).

Once the leaders prove the ROI is there and show how it can be realized, it won't take long before two things happen. First, the leaders will start to tag more stock-keeping units (SKUs) to achieve greater benefits, and second, more companies will start implementing these solutions to achieve the benefits.

So I'm very confident that RFID is close to crossing the chasm. It's unlikely we will see companies buying massive volumes of tags. That's because I expect most of the volume to be driven by [Wal-Mart](#). The retailer's 1,000 RFID-enabled stores will receive more tagged cases, but these stores handle only a small portion of the products produced by its top 100 suppliers. It will take time for Wal-Mart to install RFID in all 4,000 of its U.S. stores.

[Target](#) is taking a different approach from Wal-Mart and is not rolling out to its stores yet. (Sources say Target's focus is more about improving the customer shopping experience than improving supply-chain efficiencies.) Metro and Tesco in Europe are both eager to begin ramping up their RFID programs, but their suppliers are a bit further behind in terms of determining where the ROI is.

If we cross the chasm sometime in 2007, will RFID adoption explode in 2008? Hard to say, but I really don't see an Internet-like boom, with massive amounts of money being poured into RFID companies, sky-high initial public offerings and options thrown at all and sundry. RFID is far harder to roll out than Web technologies and involves a recurring cost that didn't exist with Web technologies (you need to keep buying tags for supply-chain applications). It will take time for fast followers to catch on. RFID is likely to grow strongly and steadily over the next few years, with all types of RFID technologies—active, passive, sensor-based and so on—being adopted across a wide variety of industries. So there might be an explosion in the number of companies using RFID in some way, without there being billions of tags consumed in the retail/CPG supply chain.

RELATED_ARTICLES So here's the bottom line: In 2007, the benefits of using RFID to track cases and pallets in the retail/CPG supply chain will become clearer, and that will begin a steady ramp up in volumes of tagged cases and pallets. RFID's benefits for asset tracking and other applications will also become clearer, and that will drive adoption of internal applications in more companies across all industries. By 2010, we might all be very surprised by how pervasive RFID has become.

NOTE: This is my last column of the year. We won't be producing our newsletters next week, though we will post news. I wish you a joyous holiday season and a happy, healthy and prosperous New Year!

Mark Roberti is the founder and editor of RFID Journal. If you would like to comment on this article, click on the link below.

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