What's Holding Up Rapid Adoption of RFID?

Hint: It isn't the price of tags, as some recent reports suggest.

By Mark Roberti

A spate of news stories last week, based on reports from two market-research companies, suggest the reason radio frequency identification didn't achieve large-scale adoption in the retail/consumer packaged goods supply chain in 2006 was that tags are still too expensive. The truth is, even if tags were a penny a piece, I doubt we would have seen CPG companies buying millions of them to slap on cases sent to retail customers. The reason is simple: Companies don't know how to extract value from tagging large numbers of pallets and cases.

At the risk of stating the obvious, if tags cost $1 each, and you could save $2 per case from using them, you'd see rapid adoption of RFID in the supply chain. If tags cost a penny and you get no benefit, there is no reason to adopt the technology (other than a customer demanding it).

Clearly, then, the issue is not price. Rather, it's return on investment. ROI will drive adoption, not the price of the tag. Obviously, the lower the price of RFID systems, the easier it is to get a return on investment. But several early adopters tell me that they proved in 2006 that some RFID applications can deliver an ROI at today's tag prices.

So why isn't RFID use in the retail/CPG supply chain exploding? Because even the earliest adopters don't have the systems in place yet to seize the opportunity. Take Procter & Gamble. The company has analyzed RFID data supplied by its retail customers and believes that using RFID to make sure promotional displays and newly launched products get to the sales floor when P&G is advertising the promotion or new product could deliver a huge ROI. But P&G isn't tagging all promotional displays and new products yet, because the company and its retail partners need time to put the technology and business processes in place to automate the process of using RFID data to ensure that the displays are out on the sales floor at the right time. Until the partners work this out, they cannot extract value from their RFID systems.

Manufacturers are now working with their retail partners on the systems and processes needed to act on the data and achieve the benefits of the RFID systems. That will take some time. But once that happens, you will see volumes start to ramp up. When volumes ramp up, tag and reader costs will come down. That will enable companies to get an ROI on other applications, but it's foolish to think that a lower tag cost alone will lead to mass adoption of RFID in the retail/CPG supply chain.

There are many companies that did not do the hard work needed to determine where the ROI is, and they might tell analysts that the main obstacle to adoption is tag cost. The analysts should then ask, "At what cost would you get an ROI?" I bet most of these companies would say they don't know.

Focusing on cost isn't going to help anyone figure out when RFID will take off, or when companies will get value from RFID systems. The real questions are: Is there an ROI at today's cost and, if so, when will companies start to realize it? I know the answer to the first question is yes—at least for some applications. The second question is harder to answer, but I'll give you my thoughts in next week's column.

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