

**A report indicates that consumer goods suppliers are pleased with the performance of their RFID deployments, but that they are not yet generally using the technology to improve business processes.**

By Claire Swedberg

Feb. 1, 2010—The adoption of RFID by businesses in the North American retail supply chain is growing due to technology improvements and lower costs, according to a 2009 survey conducted by [EPCglobal US](#). RFID adoption is taking place at a higher rate than the public perception of that adoption, according to the authors of a report summarizing the survey, and users are less concerned about technology costs than the public may think.

EPCglobal US conducted its 2009 EPC/RFID Implementation Survey of business technology users beginning with an electronic survey of its members in the first quarter of last year, with follow-up phone interviews held during the summer. The survey was sent electronically to all 600 EPCglobal US member companies that supply consumer products to retail stores, says James Mannion, the organization's marketing director, and 60 of those members responded.

The findings contradict a perception that RFID deployments have stalled, Mannion says, as 86 percent of those polled, including small companies, said they were either piloting RFID technology or had already deployed it; approximately 42 percent reported annual revenues of \$100 million or less. Of those polled, none indicated they were waiting for the price of RFID technology to drop. This could be viewed as an indicator that cost is no longer an obstacle to RFID adoption. It should be noted, however, that members of EPCglobal US typically pursue RFID technology, so if a poll were taken of the general retailer-supplier population, the results might be quite different than those found by EPCglobal.

The best news from the survey, however, involved the reported read rates, says Sue Hutchinson, EPCglobal's product manager: 86.2 percent of survey respondents indicated a high read rate—at least 99 percent of their tagged pallets—and 82 percent saw the same high read rate for tagged cases. "Those are insanely high read rates," she notes, adding that they can be attributed to EPCglobal and [ISO](#) standardization, as well as improvements in the technology itself, such as offering many alternatives in tag or reader antenna design, in order to meet the needs of different types of users.

The survey also found that impediments experienced by earlier users of RFID—such as poor read rates in the presence of high levels of metal—were no longer a concern.

The study was initiated as an update to a 2006 survey conducted by the [Grocery Manufacturers of America](#) (GMA) and [IBM](#) (see [CPG Manufacturers Need RFID Framework](#)). After analyzing the 2006 survey results, GMA and IBM issued a white paper entitled "EPC/RFID: Proposed Industry Adoption Framework," which identified three categories among the CPG industry in terms of RFID adoption: EPC Advantaged, EPC Testable and EPC Challenged. Those in the Advantaged category had the greatest rate of deployment due to good read rates, while those in the Testable category had some potential

difficulties with RFID reads around their products (due to the presence of liquid or metal), and those labeled as Challenged consisted of companies with the most metal in their reading environment.

EPCglobal US hoped to revisit those definitions to learn whether they were still appropriate after three years had passed. "A three-year span in this market is a really long time when you consider the pace at which this technology is moving," Hutchinson explains, "so we wanted to see if the landscape had changed." The survey, she says, found that the three classifications of RFID adoption were no longer relevant. In fact, she notes, it found that there was no significant decrease in read rates among those respondents who would have been considered EPC Challenged due to a heavy presence of metals.

For the 2009 survey, participants were classified as apparel, automotive, chemical, consumer electronics, fast-moving consumer goods, free foods, general merchandise, hardlines (appliances) or other. Of those who responded, 65 percent indicated they were already using EPC-based systems, while 21 percent were carrying out pilot projects, and 7 percent said they were not yet adopting the technology in any manner. No companies, however, indicated they were tagging 60 percent or more of their cases or pallets (which several firms had indicated was a "tipping point" for making the RFID acquisition cost-effective). In the 2006 GMA/IBM study, 45 percent of CPG manufacturers had responded that they believed long-term value could be derived by deploying RFID technology, but little or no value in the near term, while another 45 percent could see the long-term value for specific product categories, as well as some value in near term. Six percent also saw significant short-term value potential for special product categories.

A total of 83 percent of respondents indicated they were adopting RFID due to the request of a trading partner, such as a retailer, while about 13 percent were adopting RFID in order to improve their operations or supply chain. That question was not asked of respondents to the 2006 IBM survey.

Furthermore, the 2009 report lists specific results from some respondents. For example, one user noted that it improved read rates for pallet tags by rotating the pallets as they approached a reader. Another company indicated it raised its read rates by replacing old interrogators with newer models.

Not all news from the survey was encouraging, however. For instance, the overwhelming majority of implementations had been fueled by requests from retailers (such as [Wal-Mart](#)), and many of those companies do not collect or utilize data related to the RFID technology in use. Consequently, EPCglobal US indicates, the perceived lack of value of RFID is still an obstacle for users, few of which have created or adopted processes to take advantage of the data resulting from an RFID system.

Still, Hutchinson believes companies are beginning to seek business value in RFID, now that they have the hardware in place and it is operating effectively. "This is a reinforcement that we've moved beyond the question of whether the technology works," Hutchinson states. "We're moving up the maturity curve, so that now we can begin looking at the business case."

In addition, Hutchinson adds, EPCglobal US members have begun asking new questions over the past

year. "The tone of conversation has markedly changed," she says. "The questions we've gotten in the last year are less about protocols or readers or tags." Today, the questions are more likely to center on using information, sharing data with business partners and developing systems that can benefit a company in-house, not just in the supply chain.

The full report can be accessed at no cost, at [EPCglobal US](#)' Web site.