

The Shift to Value Up Front

Over the past year, various RFID middleware vendors have turned to offering sharply focused applications that provide immediate payback to end users.

Oct. 22, 2007—The key issue surrounding RFID during its emergence as a technology has been how to best derive value from it. The potential to provide clarity to otherwise obscure processes led companies to first apply the technology to back-end areas such as inventory or supply chain management. Unfortunately, as with any new technology solution, implementation was sometimes not quite as easy as it looked. While it would be a gross overstatement to claim growth in passive-tag supply chain applications has stalled, it has certainly not met the industry's original growth expectations.

There are several reasons for this. While the adoption of the EPC Information Services (EPCIS) standard has opened the door for inexpensive intercompany data sharing, data volumes have generally not reached the point that the inability to share has been a barrier to RFID adoption. What has been a barrier, however, has been the difficult task of intercompany technology coordination throughout the supply chain. Within a single company, it is often difficult enough to coordinate between the IT and operations teams on a project, but overcoming challenges when dealing with a new and relatively unproven technology in an interorganizational context is even more difficult.

What all of this means is that RFID vendors have had to adjust to the reality of lower-than-anticipated tag volumes. As a result, the dialogue about value has shifted within the vendor community from an emphasis on lowering the cost of the technology to increasing the benefits accrued from it. This, in turn, has led to a focus on enabling applications that would not require coordination between companies, while allowing end users to generate strong productivity gains.

This has been reflected in the products and strategic focus of various RFID middleware vendors throughout the past year. While these companies have not abandoned supply chain applications, as a group they have expanded their offerings from back-end operations to the front end. Some have focused on using middleware as a platform for software applications, while others have begun to offer their own applications.

For example, one pioneer of RFID, [OATSystems](#), recently engaged heavily in promotions-execution applications for consumer packaged goods (CPG) manufacturers (see [OATSystems Launches Solutions for Tracking In-Store Product Promotions](#)). The applications' objectives are to ensure that CPG companies know their promotional displays have arrived at the stores, are being displayed at the appropriate time and are placed on the floor for the proper length of time—and, at the end of the day, to determine how sales are affected during the promotional period.

One of the oldest jokes in advertising is that everyone knows half of a promotions budget is wasted—the problem is that no one knows which half! Therefore, the ultimate value in the OATSystems solution is its ability to ensure that promotions are executed properly and, just as important, to provide meaningful data on their value. In short, it has the potential to help identify that elusive valuable 50 percent.

[GlobeRanger](#) has taken a different approach by partnering with [5Stat](#), a division of [Store Kraft](#), in building a

smart display case for high-value jewelry. Integrated with GlobeRanger's middleware platform, the display-case system not only takes note of the movement of items in and out of the case, but includes other anti-theft measures as well. Additionally, integrated into the system is the ability to suggest compatible products, such as a particular necklace to go along with a set of earrings a customer is being shown. These features allow salespeople to focus on the customer, rather than on lower-value activities such as inventory management.

RELATED_ARTICLES Front-end applications are, by no means, limited to the retail space. In the pharmaceuticals sector, for instance, middleware vendor Blue Vector Systems has focused on pull inventory by creating a smart cabinet system for use in hospitals (see ASD Healthcare Deploys RFID Refrigerated Drug Cabinets). The pharmaceutical distributor would own and operate the cabinet, along with the drugs inside. In effect, this would create a fully automated kiosk at the hospital, allowing the distributor to manage inventory, sort out expired medication and order replacement drugs as needed. This model of inventory management has the potential to save the distributor time and money, as well as enable hospital pharmacists to concentrate on valuable services rather than inventory control.

Ultimately, while back-end applications of RFID retain the greatest potential for market growth—and the EPCIS standard is a very important enabler of that growth—front-end services have emerged in the past several months to drive value in the immediate sense. These applications have the potential to make end users more comfortable with the technology so they will invest in the infrastructure necessary to integrate it into their systems, particularly if back-end applications such as supply chain inventory management continue to demonstrate slower-than-expected growth.

Brendon Ouimette monitors and evaluates emerging RFID growth trends and best practices as a part of Frost & Sullivan's auto-ID and security services.

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