THE WORLD'S RFID AUTHORITY

Parma's RFID Lab Plans Pork Pilot

The Italian project will track packaged meat at the factory, distribution center and retail store, in an effort to quantify the benefits of using RFID and EPCglobal services in the fast-moving consumer goods supply chain.

By Rhea Wessel

Oct. 26, 2007—The RFID Lab at the University of Parma is designing a pilot to test EPCglobal-compliant hardware throughout the supply chain, as well as EPCglobal's Discovery Services. The RFID Logistics Pilot, as it is officially known, will reach the operational testing phase early next year.

This will be the first Italian pilot in the fast-moving consumer goods supply chain, says Antonio Rizzi, the founder and head of the RFID Lab. More than a dozen manufacturers, retailers and third-party logistics providers, as well as universities and technology partners, will participate in the project, which has a budget of €280,000 ($396,000), all privately funded.

The goal of the project is to quantify the benefits of using RFID to trace products throughout the supply chain, and to determine how the use of EPCglobal services—such as Electronic Product Code Information Services (EPCIS), Object Name Services (ONS) and Discovery Services—can optimize supply chain processes. Project members will tag more than 20,000 product cases as they move from the manufacturer to a warehouse or distribution center, then on to one or more retail stores.

Last year, the University of Parma's RFID Lab successfully tested equipment, hardware and software, and sought approval to begin testing RFID systems in a real-world environment. More than a dozen companies belonging to the lab's board approved the request by endorsing the ongoing logistics pilot, which launched in June 2007 and will run until mid 2008.

In the first phase of the trial, partners mapped current supply chain processes to "re-engineer" them for RFID. The project then moved to the implementation phase, in which the hardware and software infrastructure is currently being set up. The experimental phase is due to begin in early spring 2008, and will

last at least four months. In this stage, product pallets and cases will be RFID-tagged and tracked throughout the supply chain.

"We want to pay special attention to all relevant processes in the distribution chain, including the replenishment process in stores," Rizzi says. "We know from other universities partnering with us that major retailers, such as Wal-Mart, are implementing RFID to have more accurate replenishment of their shelves with less stock-out time, as well as punctual control over promotions. This is a critical issue we want to address properly."

Consortium members include Auchan, Chiesi, Cecchi Corriere, Conad, Danone, Grandi Salumifici Italiani, Gruppo Goglio, Lavazza, Nestlé, Number1, Parmacotto and Parmalat. While only a few member companies are providing products and facilities for field-testing, all are involved in the project engineering, from a technical and operational point of view.

"This is a common practice in many RFID Lab activities," Rizzi explains. "Companies share costs and benefits, and have the opportunity to benchmark."

For the trial, Parmacotto will apply passive EPC UHF RFID tags to cases of cut and packaged pork products made at its Parma production plant. The cases will be tracked as they are moved to a Milan-area distribution center run by Auchan, one of the largest retailers in Italy, and then on their way to several Auchan-owned retail outlets.

Oracle will provide its Oracle DataBase and Oracle Fusion Middleware for data acquisition and management; Avery Dennison, Caen RFID, Impinj, Intermec, ITG, LXE, Motorola, Siemens, Toshiba TEC and UPM Raflatac, meanwhile, will support the development of hardware. Universities working in the Global RF Lab Alliance Network will participate in the project as well.

Id-Solutions, an RFID spin-off of the University of Parma, is a primary sponsor of the project, contributing €80,000 ($115,000) to its overall budget. Id-Solutions is working with Oracle to develop the software infrastructure, and will be in charge of integrating and running the entire computer system.

Each member of the project will have access to tag data, via an EPCIS-based system, as well as to a logistics dashboard showing how goods are progressing throughout the supply chain. Researchers will test the algorithms used in the Discovery Services, and project partners will develop ONS and Discovery Services applications that can connect to EPCIS.

RELATED ARTICLES

The project partners plan to test hardware from all vendors. "We'll have Siemens [hardware] in one store, Impinj at another," Rizzi says. "We don't want to be exclusive—everybody is taking part on a shared basis." The implementation phase is expected to last until spring of next year, when the testing period will commence.

"Then we have to decide the value of RFID," Rizza adds, "and start, from the results achieved, to develop and expand the pilot and set new objectives."

| Back to normal page view | Send this article to a friend |