Indiana companies begin
EXPLORING RFID

Logistics, life science firms eager to tap potential for efficiency

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By **Peter Schnitzler**

Indiana businesses are starting to explore radio frequency identification, an innovation that's fast-emerging as the biggest thing since bar codes. But beware. Despite its promise, RFID is no panacea. Even RFID experts say it's not the equipment. It's how you use it.

"This is not a technology solution. This is a business-process solution," said Gary Hobbs, CEO of Indianapolis-based RFID advisor HTech Consulting LLC. "Developing good requirements and understanding impacts on an organization first is more important than just implementing the RFID part of it."

At its core, RFID is simply an automatic tracking system. It utilizes signal-emitting transponders called RFID tags, which can be attached to objects. In turn, those signals are gathered by RFID receivers, which log the information into a computer system.

Used properly, RFID allows a company to accurately track the exact location of items within its supply chain. Precursors to RFID date back to the World War II era, but it has only become economically viable to miniaturize and produce the technology on a large scale in the last few years.

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–Eric Isom
Sentry Logistic Solutions

Health care & life sciences

Indianapolis-based Sentry Logistic Solutions, Inc. is also exploring RFID's potential in the life sciences sector. Sentry's core business is the transportation of products and components for the pharmaceutical and biotechnology industries. Eric Isom, manager of Sentry's warehouse operations, said his firm is investigating how to create an RFID system that would also monitor the temperature.

Sentry has formed a partnership with locally-based BioStorage Technologies, Inc. to provide one another with a range of cold storage and logistics services.

The FDA is expected to begin enforcing a pharmaceutical standard first introduced in 1987 that requires drug makers to show their products' chain of custody from production to consumption. It's meant to guard against spoilage.

"In our facility, we're pretty much state-of-the-art as far as the storage of biopharmaceutical products. We want to take it the next step and be the leader," Isom said. "Where you see most of the problems that occur are when somebody forgets to place a skid back where it's supposed to be, or they place it in the wrong temperature environment. We're looking for a system that would say 'Hey, I'm in the wrong place' and actively notify us."

As RFID becomes more pervasive, its applications will likely stretch far beyond what anyone envisions today. N. Prabhu, the James J. Solberg Head of Industrial Engineering at Purdue University, has been studying RFID. He said its current stage can be compared to the original introduction of elevators when they were first developed.

A century ago, nobody envisioned tall buildings. Elevators were simply meant to solve the problem of walking up and down stairs. But the long-term result was that skyscrapers became possible.

Much the same is possible for RFID.

"It has the potential of not only solving the immediate logistics problem of moving commodities, but we believe it's going to open new avenues for the way things are done," Prabhu said. "It's much like e-mail. There was a time when accessing e-mail or the Internet used to cost quite a lot of money, and the use of e-mail was correspondingly restricted. Now with the dropping costs of accessing the Internet, almost to the point where e-mail costs nothing, it drives its own expansion."

"It's going to happen," he added. "It's just a question of when the cost will drop to the point where deploying RFID tags is not a financial issue, but an issue of strategic management." ■