Microsoft Pilots RFID Middleware

The software kingpin discloses details about its first RFID supply chain management (SCM) pilot project.

By Jonathan Collins

Jan. 27, 2004—Software giant Microsoft announced its first RFID supply chain management (SCM) pilot project. The company is using the pilot to develop and test new RFID-capable software that it plans to bring to market next year.

Launched in December at a company named KiMs, the pilot is set to run for six months. Based in Funen, Denmark, KiMs is Denmark's largest snack food producer. It's also the perfect midsize company to provide a test case for Microsoft's planned move into RFID, according to the software company.

"KiMs is super-typical of a mid-market company in size and in that it outsources some of its supply chain and some of its production," says Bjarne Schon, director of supply chain management with Microsoft Business Solutions Denmark, the Microsoft business division Hellerup, Denmark, that is heading the pilot.

Microsoft plans to market its RFID products to similar midsize companies, Schon says, and middleware developed for the KiMs pilot will be tested and integrated with Microsoft's Axapta warehouse management system by next year.

"There are 39 million mid-market-sized companies around the world. If we productize what we have developed for KiMs in a good way, we have a huge opportunity," says Schon.

KiMs employs 270 people and ships approximately 100,000 pallets of snacks per year. Its pilot RFID deployment is using read/write RFID tags on about 70 percent of the pallets that carry finished goods out of production and into a third-party warehouse. The goal is to give KiMs greater knowledge of the exact location of its products at various points in the supply chain, to increase product availability for its customers.

Microsoft Business Solutions says it joined with a number of partner companies in the pilot, including SAMsys, which designed and implemented the RFID network; Philips Semiconductors, which developed the chips; Aston Business Solutions integrated the RFID network with the Axapta application; and Avery Dennison, the maker of self-adhesive labels, which produced the completed RFID tags.

The RFID network uses Philips HSL chips and SAMSys readers operating in the 868 MHz UHF frequency. Data, once collected from the tags, is fed into KiMs' existing Microsoft Axapta system.

The pilot—which runs the new RFID network alongside KiMs' existing barcode system—assigns each pallet a unique identifying number that is automatically written to the RFID tag placed on that pallet. Loaded with KiMs chips and other snacks that have been bagged and boxed, the pallets are moved through a staging area, where they are picked up by trucks and then delivered to a distribution center also equipped with RFID readers. Although the tags are written to only once during the pilot, the system can write to a tag multiple

times because KiMs wanted to test a system that would enable rewriting should the company expand the pilot.

According to SAMSys, the KiMs pilot is a model for future deployments. “It is a template for an extremely replicable deployment. Nothing was used that could not be replicated into a host of other applications,” said Cliff Horwitz, chairman and CEO at SAMSys, which is based in Richmond Hill, Ontario.