

# THE PACKER

## Advances in technology go beyond traceability

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(Jan. 19, Food Safety/Traceability Special Report) A variety of technology companies have jumped to the fore to claim they have the most complete solution to produce traceability. More than simply tracing back a case or even an item, the competitive edge is their added value to marketing and streamlining other production processes.

Jeff Tazelaar, RFID product manager for Lowry Computer Products, Brighton, Mich., said his traceability solution, Secure Visibility, provides traceability data in real-time from case to item-level tracking of bar codes or radio frequency identification labels.

Tazelaar said Lowry's advantage is a platform that allows the addition of modules for added functionality beyond the basic track and trace function. One example is a module for digitally completing pre-harvest food safety forms on the same handheld device used for tracing.

"You've got your traceability, but then you start looking at adding attribute data," he said. "What was the condition of the field, of the workers? Who picked this particular product — the labor module — ultimately what were the temperature conditions during shipping?"

Tazelaar said Lowry entered the fresh produce traceability market when PTI established the standard GS1 electronic coding for commodities. Secure Visibility is compliant with GS1, and since it is based on the open source Microsoft network, non-Lowry devices anywhere along the supply chain can read the labels.

Gary Saxer, chief evangelist at Infratab, Oxnard, Calif., said his job is to make people into believers (hence the title "chief evangelist"), and part of that is getting them to believe that spoilage does not have to be a built-in cost. He said the RFID advantage over bar codes in his device means it can simply be pointed at a case or palette, and does not have to be aligned like barcode readers.

"Wal-Mart's top 100 suppliers must use RFID on the palette level, and they are getting more and more down to the clamshell level," he said.

Saxer said his RFID tags have a temperature sensor in them that measures the temperature throughout the food chain to calculate a "Freshtime" percentage of shelf life left based on different commodities.

The result can be significant savings in food spoilage.

"The temperature sensor wakes up on a regular basis, measures the temperature and determines, based on that individual produce, the effect on the product and stores the effect on the product," he said, adding that most customers have the temperature sensor "wake up" five times per hour.

"We have a customer using our tags to track cut fruit coming from Africa going into Europe," he explained. "Cut fruit has an incredibly high profit margin, but the problem is it has to be temperature maintained."

Saxer said before Infratab, the company used overly conservative estimates of necessary transit conditions to ensure shelf life. Once it had a device monitoring and reporting those conditions en route, using Infratab paid for itself in cost savings by basing estimates on precise data.

Scott Carr, president and chief executive officer of YottaMark, Redwood City, Calif., said his product, HarvestMark, has seen a “tremendous uptick in demand” since introduced at the Produce Marketing Association’s Fresh Summit in October in Orlando, Fla.

“Part of that is the aftermath of the Salmonella Saintpaul outbreak and part of it is the produce shippers and their buyers are seeing the potential business value that can be derived,” he said. “It allows the shipper and the retailer to connect in different ways with the consumer. We enhance the marketing relationship, the buying relationship by providing on-demand information that might be telling the story of the growing region or the grower.”

Carr said an example is a sticker on watermelons grown in Georgia that had hundreds of searches by consumers curious about where the watermelon came from. Consumers saw the “Harvestmark.com” and the traceability code on the sticker and with no further instructions they were led to photos and a story about the grower, the region, the farms and the product.

“Sharing more information has become more powerful,” said Carr, who believes bar codes are still the best solution because of RFID tags’ inability to be read through water and risks associated with where the tags can be placed. Carr said by installing scanners on existing output conveyors, every case can be scanned easily with no change in the production process.

“Imagine that you’re a consumer and you’re confused about all of this Salmonella Saintpaul stuff and you see a label that says ‘Mexico,’ and you go in there and trace Del Campo tomatoes and you see the high-quality food safety programs, the story of what a Mexican hothouse is like. It changes your perception,” he said. “What’s really powerful is it’s about the product you’re holding in your hand.”