

Software Targets A Safer Food Supply

New functionalities open up more information sharing.

BY DUANE CRAIG

Long before food safety and traceability were making headlines, software companies were including trace-forward and trace-back functionality in produce industry programs.

Here is an alphabetical overview of industry software and its contribution to keeping the food supply safe.

dPRODUCEMAN SOFTWARE

Charles Shafae, president, dProduceMan Software, Half Moon Bay, CA, worked his way through college at a California produce market. "I knew the specifics that existed at the [produce] market and I had the background for both computers and business," he says. Since then, dProduceMan has grown from an accounting package to include all other aspects needed by a produce business.

The ability to trace product runs throughout the software package. "To be able to trace, you have to be able to trace through the invoice, the order and the payables," he explains. "The idea is to know where it came from and where it went as well as when it came in and exactly where it was stored."

dProduceMan has a stand-alone version and a Web-based edition. Both have the same functionality but the Web-based version is maintained on dProduceMan servers and is fee based. The benefits include not having to have the hardware in-house, information available anywhere the user can access the Internet plus data and content backed up in two places each night.

The company is currently looking for customers to beta test a new functionality that will allow anyone with the proper authorization to enter a lot number and track the lot's origin. "This will allow our

clients' customers to track the origin of the products they have purchased," he explains.

FAMOUS SOFTWARE, LLC

In 1975 Famous Software, LLC, Fresno, CA, provided software for inventory management and grower accounting. Today, it provides an all-inclusive business solution for thousands of produce industry customers in North America and beyond.

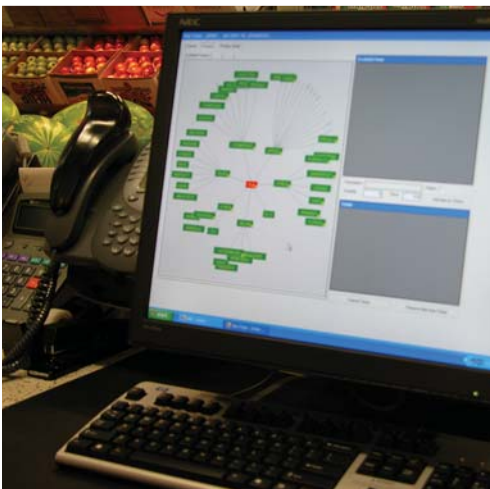
The software keys on the purchase order (PO) and sales order. In between, pallets are identified with a ticket linked to the sales order. Pallet tickets can be bar code or RFID. The system is made up of several modules that fit businesses throughout the chain up to retail. The software also integrates with all e-commerce packages adding more functionality to traceability through the various portals.

"You can identify where the crop came from," explains Ray Connelly, sales manager. "We're able to do that with Famous all the way from field to fork. We can track it from the field of origin where it was harvested, when it was received into inventory, when it was packed, all the way through to when it was sold and who it was sold to. Quantity is tracked through the systems and dollars are tracked as well."

Using a drill icon, the user can see where more information resides and easily call it up to the screen. The company is currently in a pilot to integrate all Famous sites. So if growers and packers and their marketing or distribution companies are running Famous, their systems will be able to talk to each other and even accomplish front-end transactions. "This is all how we're trying to enhance visibility to the complete supply chain and provide full traceability," he adds.

KIRKEY PRODUCTS GROUP

According to Don Walborn, vice president of sales and technology, Kirkey Products Group, Longwood, FL, all produce industry software companies provide traceability. The ongoing challenge is making the information more easily accessible. "We need to continue to work to consolidate all the information



throughout the supply chain.”

Walborn sees a need for all software manufacturers to design packages that can talk to one another. “We have to be a repository,” he explains. “That’s crucial. Does the software store external information? Is it easily accessible?”

Kirkey’s goal is to make the database more accessible more efficiently. “The technology is there. It’s technically possible to get the information, but technology doesn’t help if you don’t know the nomenclature.

“We need a data pool so the end users can get to the data they need. Kirkey has opened its database and made it more user-friendly in terms of data extracts and data pools,” he notes.

MEASURE

Measure, Las Vegas, NV, creates software for fresh-cut companies and other processors. Its software tracks all purchases of raw components incorporated into a recipe. When a commodity is purchased, each container is issued a PO lot number linked to the database record that reveals the vendor, receiving date and person who received it. The record might also include inspection information such as time, temperature and condition. When the lot is ready for processing, it is added to a work order for a particular recipe.

All the people who handle the lot become a part of the record. “We have touch screens on the shop floor. As employees are clocking in and clocking out of each job, we track who’s touching the product and what they’re doing with it,” says Mark Van Leeuwen, president.

As work orders are closed, their numbers plus the sales order number travel with the finished product to the customer. The final customer can tell when the item was produced, what raw materials were used, where they came from, who the processor was, who handled it, what they did to it and temperature and condition information at various stages in the product’s life.

“We’re one of the few that has that level of detail available with just a few clicks of the mouse,” says Van Leeuwen. “We’re successful because we have the ability to provide that information accurately, consistently and quickly. We do inventory control, payables, receivables and general ledger — we do all the main business functions but what we do that sets us apart is we have all that plus traceability and lot recall.”

MOTEK

Motek, Beverly Hills, CA, focuses on warehouse management. Priya, its only software product, notes Caroline Neal, director of marketing, is “a warehouse management sys-

tem that manages all aspects of inventory and labor within the four walls of the warehouse.” The package, which includes lot code tracking, operates in real time while tracking things such as expiration dates and shelf life.

The software allows a wide range of data to be captured. For example, a location is assigned to a forklift so the user knows not only the product was at Point A and later at Point B but also how it got between the two points. If workers sign on to forklifts, the person who moved the product is also identified. Storage conditions, such as temperature and humidity, can be tracked, and inspections and their results are also recorded.

Priya excels within the warehouse but is not confined to it. “A good WMS [warehouse management system] will also reach beyond the walls,” says Jay Dinwoodie, CIO. “We reach out to other systems so we know a lot about the origins of products. Our customers run very high percentages of accuracy. What they think they received, they really received; what they think is on the shelf is really on the shelf; when they think they got it is when they really got it; where they think they put it is where they really put it; and when they think they shipped it and to whom really shipped it and where they shipped it are all what really happened.”

PARK CITY GROUP

The software from Park City Group, Park City, UT, sells primarily to supermarkets, convenience stores and restaurants; it specializes in production planning, inventory control and product quality.

“Our primary mission is to help retailers monitor freshness so they’re not overextending shelf lives,” says CFO Will Dunlavy. A client building recipes includes procedures and the software can provide online training to get employees up to speed. It also ties into the front end of the store so out-of-code items cannot be rung up, preventing potential foodborne illness problems. The software can also be set up to trace a product through its cycle.

“The ability to tie a barcode into the register system is a unique opportunity that we offer,” says Park City’s Dunlavy. “That is a very strong item for food safety. Procedures have to be followed and our software helps to track those procedures.”

Online task management allows a store to specify a task for a produce worker and follow up to ensure it was completed. The software also offers a method for coaching and teaching about produce handling. In addition, it can tie into refrigeration systems that generate status messages, thereby providing a way to send notifications when products are threatened by environmental factors.

PRODUCE PRO

The software from Produce Pro, Inc., Woodridge, IL, is an all-in-one package with a few modules to be added as needed.

"Every component of the system software is under our control," says Steve Reilly, national sales manager. "Everything is fully integrated — all the data, all the logic flows as it should. We don't have anything off the shelf from another vendor that we forced into our system.

"From day one, the software has had traceability by default," he adds. "It's not a new feature — it's here full-blown. It answers all questions users would need to know about the product they are distributing. Every step of the way, from the moment an item is procured, it is fully traceable."

Even before the product is physically received, the system is tracking it as a lot. Any information the user wants to have associated with the product is easily accommodated. Beyond the physical movement of produce, the software allows users to track a record of the people who handled the lot and records of inspections. Lots can also be identified by quality and all documents associated with them are available to authorized users. Another unique aspect of Produce Pro is that it goes beyond just software. Of the approximately 40 people who work

for the company, 75 percent or so are technically oriented to both software and the produce industry. Reilly emphasizes the system evolves daily by following ideas from employees and produce companies.

SILVER CREEK

Boise, ID-based Silver Creek Software (SCS) "is many things for many people, from the inexperienced users who want their software to simplify their business and automate their processes, to the users who like to learn and do things on their own," says Tina Reminger, vice president. "Our clients can delve into more complicated things, like designing data drillers and writing complex technical reports. The program can also accommodate those who want to keep things simple and spend as little time as possible on their computers to get their essential duties done."

The lot tracking options in SCS' Visual Produce accounting and management software allow for tracking items and/or lots. Users can look up where the product came from and which customers the product was shipped to. Another built-in food-safety option involves food inspection records. Visual Produce records the frequency, quantity and reasons food products are returned. This history helps when choosing suppliers

for new orders. Reminger emphasizes the software's ability to track rapidly moving inventory in a time- and cost-effective manner, minimizing the difficulty of implementing warehouse inventory systems. She stresses a warehouse system is useful to determine the source of food contamination and minimize the scope of recalls.

Visual Produce Grower Accounting software pinpoints the exact location on a farm where a particular product originated and helps make food recalls more effective. SCS has also created an audit report that keeps track of food-safety information for each item a grower supplies, including expiration dates, audit numbers and inspection numbers.

SOLID SOFTWARE SOLUTIONS

Henri Morris, president, Solid Software Solutions, Houston, TX, maintains that huge volumes of produce moving quickly through terminals and distribution centers are crying out for some type of efficient tracking — and his company's Edible Software offers just that in the form of software that works on personal digital assistants (PDAs).

"It is difficult for the vast majority of companies to track produce because it moves so incredibly fast," says Morris. "The turnover is so fast and furious that between when it is



received and when it is sent out, there's no way they can adequately track and monitor it. We saw that technology was moving into handheld capabilities, so we've come up with a number of handheld PDA solutions."

The PDAs, supplied by others, are industrial strength; they hold up to cold, hot and wet conditions and can survive being dropped. They include barcode readers and scanners and have wireless capability.

When a PO is created or a shipment arrives at the warehouse, the software produces large pallet labels with bar codes, which are affixed to the pallets. Using a PDA to scan the bar code on the label, users can identify what is on the pallet, the vendor, pallet number and PO number. A clear plas-

tic pouch that includes labels for each individual case on the pallet is put on the side of the pallet. If the pallet is broken down, the individual case labels are affixed to the product being removed so the record of that item's identity is maintained as it continues through the supply chain. In this manner, the system satisfies the requirement to be able to trace the origins of a produce item.

WAUDWARE

During the late 1980s and early 1990s, F. Charles Waud, president, WaudWare, Brampton, ON, Canada, supplied accounting systems to produce companies. One wanted to do more on the inventory side so Waud created software to fit the bill. It started with

inventory counting and lot control and went on to become PICS (Produce Inventory Control System), a full-blown system that has general ledger, accounting and everything else a produce company would need. Originally marketed to wholesalers, today's package also is used by jobbers, packers, growers, a catering operation and even a flower store.

"Around 9/11, we started becoming more aware of traceability and food safety," notes Waud. "Food safety is a lot about people keeping their plants and facilities clean and making sure the components going into their products are watched."

A Web-based track-and-trace module is due out this summer. Customers will be able to put it online and open it up to their customers and vendors to see what was sold and where it went. On the flip side, a customer could log in and look at the product it bought from the company and see where it came from. "So it would go up and down the distribution chain by one level," he confirms.

Another aspect helps with lot control, keeping incoming product shipments separate. The software is also ported to PDAs. WaudWare provides full service, which includes the hardware, or they hook the customer up with a hardware provider. **pb**