



THE GLOBAL LANGUAGE OF BUSINESS



CASE STUDY

Produce company achieves visibility of produce throughout supply chain with case- and item-level traceability.

SUNFED®: PRODUCE YOU CAN TRUST AND TRACE



“I felt the PTI [Produce Traceability Initiative] was something that could help us really take our focus on food safety and freshness to new levels.”

—MATT MANDEL, Vice President of Sales & Marketing, SunFed

CHALLENGE

With the tagline of *Perfect Produce*®, SunFed is devoted to exploring and implementing the latest innovations for produce freshness and safety. So when the company heard about the Produce Traceability Initiative (PTI), it quickly called on the GS1 US™ solution partner, HarvestMark® for support.

SOLUTION

With help from HarvestMark and GS1 Standards, SunFed has made case- and item-level traceability an integral part of its business and has full visibility of its produce traveling from fields to kitchens.

BENEFITS

- Achieving end-to-end visibility of produce from field to packing house to retailer to the consumer’s kitchen.
- Gaining greater control of the supply chain and inventory.
- Collaborating with retailers on promotional campaigns based on historic consumer buying patterns.
- Building brand recognition among consumers of fresh produce.





FRESHNESS AND SAFETY

Headquartered in California, HarvestMark has over 200 customers growing on over 3,000 farms in the U.S., Mexico, Canada, and Latin America, and has made traceable more than 3 billion packages of fresh food including berries, melons, tomatoes, potatoes, herbs, and even poultry.

Elliott Grant, its founder and CMO, wants to change the world ... at least the way the world eats. “Consumers want access to information about their food—where it came from and how it was grown. They worry about recalls. With item-level traceability, we give them greater control and peace of mind ... and the ability to give feedback directly to the grower.”

Grant also points to the benefits for produce companies when they have more control over their supply chains by getting real-time product information. “Most companies rarely, if ever, have to deal with a recall. But the supply chain benefits of traceability include improved inventory and freshness management, brand recognition, stronger retailer relationships, and higher quality food for consumers every day.”

The HarvestMark and SunFed partnership grew out of the Produce Traceability Initiative (PTI), a voluntary initiative by more than 50 companies in the produce industry to move the supply chain to a common standard for electronic produce traceability at case-level by the end of 2012.

Matt Mandel, vice president of Sales & Marketing at SunFed and a partner in the company, with an information systems degree, traces his interest back to when he first read about the PTI. “I felt the PTI was something that could help us really take our focus on food safety and freshness to new levels.”

To deliver perfect produce, SunFed stays abreast of changes and developments within the industry. “We are a technologically focused and progressive small business,” Mandel says. Following his initial introduction to PTI, Mandel got SunFed on board with the potential for traceability standards.

“Today, 95 percent of our products are on the case- and/or item-level traceability system—and we’re working to migrate more products to item-level labeling. This is something we are proud of and couldn’t have done without help from HarvestMark.” —**MATT MANDEL**, Vice President of Sales & Marketing, SunFed

SunFed, a privately held full-service produce company in Arizona, grows in 31 locations, delivering a diversity of fresh produce virtually year-round.

The company has had a commitment to food safety that predates many of the current initiatives that are top-of-mind in the industry. SunFed has its own internal food safety standards and audits, administered by SunFed’s food safety specialists, and all of SunFed’s growers follow protocols for food safety, and submit to third-party field testing.

Known for innovation in both its packaging and approach to extending shelf life for its tomatoes, squash, melons, cucumbers, peppers, beans and eggplants, it’s no surprise that SunFed teamed with HarvestMark, a GS1 US solution partner, to become an early adopter of produce traceability. The SunFed tagline—*Perfect Produce*—can now be paraphrased to include “perfectly traceable produce.”

When SunFed and HarvestMark joined forces in 2009, their combined mission was to effect end-to-end serialized coding of every single item of produce coming out of the SunFed’s Nogales distribution center.

As HarvestMark describes it: “a system that links the first and last mile of the supply chain—from seed to kitchen and back.”

WHEN SPINACH CHANGED THE WORLD

The Salinas Valley spinach recall of 2006 forever changed the way consumers and the produce industry think of product recalls. Seven people died from tainted spinach. The event shined a very bright light on the fresh foods industry that could not tell where the spinach had come from and where it had gone. As a result, all spinach was pulled from retailers’ shelves and the entire spinach industry was devastated. It took until 2011 for consumption levels of spinach to recover to what they were in 2006.

ITEM-LEVEL TRACEABILITY



A HarvestMark serialized code in a Data Matrix barcode can be scanned by consumers with smartphones to get information on that item—like whether it's subject to a recall.

The GS1 DataBar barcode on each item gives retailers point-of-sale information.

The PTI uses GS1 Standards, the most widely used product identification and supply chain standards in the world. The Global Trade Item Number® (GTIN®) is part of the GS1 System of Standards and is encoded in the barcode found on many consumer products. For SunFed, GTINs with lot numbers are encoded in GS1-128 barcodes on case labels in its packing sheds.

While PTI milestones call for case-level labeling in 2011, HarvestMark and SunFed have taken it one step further to label every honeydew, cantaloupe, watermelon and eggplant coming out of SunFed's fields. Five months after launching its initiative, SunFed was applying traceability standards to items and cases at its largest locations.

"Today, 95 percent of our products are on the case- and/or item-level traceability system—and we're working to migrate more products to item-level labeling. This is something we are proud of and couldn't have done without help from HarvestMark," says Mandel.

BRAND LOYALTY

When a SunFed packer selects any of the select products to send to her customers, she labels each piece (or each pint for smaller items) with a serialized code proprietary to HarvestMark and SunFed—the code consumers can then use to access information about the grower on the HarvestMark website or on their smartphones with the HarvestMark app. Each item is also labeled with a GS1 DataBar™ Stacked Omni-Directional barcode which encodes an item-level GTIN for retailers' point-of-sale transactions.

Then, each piece of produce is packed into cases labeled with a case-level GTIN and the corresponding Batch/Lot

Numbers. Both the serialized item-level code provided by HarvestMark and the case-level GTIN point back to the same Batch/Lot Number.

"As a case of eggplant moves through the supply chain, the unit of commerce is the case, which can be tracked to the retailer," explains Grant. "When the items are removed from the case and placed on the shelf, the item-level tag really becomes important. Now, a shopper at the store shelf or in her kitchen can do a trace-back. Should the FDA pick up an eggplant and find that it tests positive for something, the case is gone, but they can still trace it instantly back to the source."

The serialized item code automatically tracks through HarvestMark.com, so a consumer with a smartphone can scan and instantly receive the traceability information on

CANTALOUPE: A CASE LABEL IN POINT

To put this remarkable end-to-end traceability into stark perspective, the cantaloupes recalled in September 2011 because they tested positive for the *Listeria* bacteria—linked to at least 28 deaths and dozens of illnesses—did not have case-level labeling.

Had the melons been labeled by carton—or individually—the recall that involved 17 states may have been limited further by revealing the exact field from which the infected melons were harvested and determining where those melons were shipped.

Pinpoint accuracy of traceability has the potential to reduce turbulence in the industry and avoid category-wide fear among consumers.



“Historically, it has been hard for produce companies to create a brand that consumers would recognize consistently. That is changing. Fresh produce brands are emerging and they are taking lessons from consumer goods companies.”

—ELLIOTT GRANT, CMO,
HarvestMark

.....

sized produce companies to create a brand that consumers would recognize consistently. That is changing,” says Grant. “Fresh produce brands are emerging and they are taking lessons from consumer goods companies. SunFed has a great brand—it is a quality player that takes extra care in having a perfect product. They now have the ability to tell consumers what is different about a SunFed product—and shoppers become advocates through social media. This opportunity didn’t exist before. Traceability technology communicates benefits to a consumer in a new way and tells the story with integrity.”

While SunFed’s mission has always been driven by food safety, the item-level traceability it has implemented serves many of its other quality objectives, such as produce freshness and the speed of delivery to store shelves. With a highly perishable product moving through a complex supply chain, there is the risk of significant “shrink,” food that is wasted because of improper handling or rotation. With traceability, SunFed has gained visibility across its supply chain, allowing it to deliver fresh fruits and vegetables to

that item—like where it was grown and whether it’s subject to a recall. “And, the possibilities for brand identity and recognition are limitless,” says Mandel. “The consumer can see the eggplant is from SunFed, find out on which farm in Mexico the eggplant was grown and perhaps even pictures of the farm, the day it was picked, the story behind the farmer, nutrition information, and even recipes. If the produce is certified organic or certified sustainable, the consumer can click through and perhaps see the certificate, enhancing our company’s brand integrity.”

As more and more consumers make use of this technology, the opportunity to build brand loyalty is profound for produce growers/packers and distributors who may have been largely hidden from consumers in the past.

“Historically, it has been tough for small and medium

store shelves faster and to know the consumer is enjoying the fresh produce it strives so hard to maintain.

Today, SunFed can look at a dashboard supplied by HarvestMark that graphically shows every time a shopper scans a squash with a smartphone or tracks it at the HarvestMark website: the location of the farm where it was grown, the date it was harvested, and when it was traced to someone’s kitchen in California.

These “thousand points of light” on a map are tremendously valuable. The dashboard might reveal that although SunFed is packing and shipping the load of squash within 24 hours, it is taking 10 days to get to a certain store, raising a red flag. The company can then take actions to take days out of the supply chain and give them back to the consumer by way of fresher produce.

SunFed can look upstream at produce that was packed today and what GTINs were used: telling them exactly what is being packed, the size, the configuration—all supplied through the GTINs.

“I can see how many cases of squash were packed across all of the packers,” says Mandel. “I no longer need to call growers by phone, or have them supply the information—the system is doing it automatically. I can say that ‘today, we are harvesting seedless watermelons—that the variety of melons is Palomar, that I am harvesting from lot 43E and I used harvest crew 17.’ You can get as granular with the data as you want.”

In addition to the ability to have its superior produce linked to its brand name, SunFed finds the data to be invaluable in increasing its collaboration with retailers.

Mandel explains, “The old system of sales consisted of growing and harvesting product and then finding a buyer. A retailer now has assurance that he can work along with us to get the product he needs. For example, if the retailer is planning to run an ad in October for zucchini, he can

TRACEABILITY TURNKEY SOLUTION

HarvestMark provided SunFed a turnkey solution for case- and item-level identification and management. At the case level, GS1 Global Trade Item Numbers (GTINs) with Batch/Lot Numbers are encoded in GS1-128 barcodes on PTI-compliant labels. On each produce item, a HarvestMark serialized code in a Data Matrix barcode gives SunFed insight into the “last mile” of traceability—from retailer to consumer. SunFed also uses the GS1 DataBar Stacked Omni-directional barcode on each item for retailers’ point-of-sale applications.



“Now that we have item-level traceability—and the ability to hear directly from our end-consumers, we have instant and constant feedback and that’s another big part of who we are and what we do.” —MATT MANDEL, Vice President of Sales & Marketing, SunFed

check with us in March on volume, and perhaps even have us increase production to meet their marketing needs. It is a much more collaborative effort.”

With traceability, SunFed can collaborate even more with its grocers. With greater surety of supply, the company can develop programs with customers throughout the year. Mandel says. “Now that we have item-level traceability—and the ability to hear directly from our end-consumers, we have instant and constant feedback and that’s another big part of who we are and what we do.”

LESSONS LEARNED

THE COST OF TRACEABILITY MAY BE LOWER THAN YOU THINK. Grant cautions companies that assume traceability has to be expensive. “People hear \$50,000 or \$100,000 and that scares them. But for small and medium sized growers, that’s not accurate.”

HarvestMark PTI solutions start at \$1,500 per year for all of the software, data hosting and support; they add a computer and a printer, which is about \$3,000 worth of hardware. “Companies will also need a GS1 Company Prefix to uniquely identify their company within the GTIN.”

DON’T HESITATE TO SEEK EXPERT SUPPORT. Mandel reports that there is the inevitable ramp-up time, learning the new language of GS1 Standards and what needs to be done within existing processes. “We decided early on to hire HarvestMark for their expertise. They have the needed experience with GS1 Standards and other customer installations to make the implementation much smoother.”

HarvestMark provided a turnkey solution that included establishing SunFed’s GTIN lists that met PTI standards. Grant continues, “We also made sure that all GTIN data—case dimensions and weights—were accurate for loading into the GS1® Global Data Synchronization Network™, or GDSN®.” Mandel concludes, “We go through our normal sanitization, cooling and packing and then we apply the labels. It flows very easily.”

UNDERSTAND THE BENEFITS. “Some producers say ‘I already have a traceability solution,’ what they mean is they have internal traceability. But tracing back their products once they move down the supply chain can get really difficult,” explains Grant. “The goal of whole-chain traceability is an industry-wide effort where any player in the supply chain can rapidly trace back and trace forward using a common language to get instant information about a product.”

Supply chain benefits are also manifold for the business. “We now have improved visibility into the supply chain and expect to better manage our inventory flow—getting the right produce in the right place at the right time,” says Mandel. “And, of course, traceability helps us deliver a fresher, higher quality product for our consumers.”

BE PART OF THE FUTURE—NOW. “Five or 10 years from now, when the industry has gone through this transition, we will look back and say, ‘How did we ever manage without this information? How did we make sure the right inventory was in the right place? How did we measure the age of products going through the supply chain? How did we figure out which seed varieties or harvest practices delivered the best product to the consumer?’” Grant says. “I really believe that traceability will prove to be transformational for the produce industry.”

ABOUT THE PRODUCE TRACEABILITY INITIATIVE

Sponsored by Canadian Produce Marketing Association, GS1 US, Produce Marketing Association and United Fresh Produce Association, the Produce Traceability Initiative (PTI) is designed to help the industry maximize the effectiveness of current trace-back procedures, while developing a standardized industry approach to enhance the speed and efficiency of traceability systems for the future. The PTI has a bold vision, which outlines a course of action to achieve supply chain-wide adoption of electronic traceability of every case of produce by the year 2012. The PTI website serves as a central resource to provide industry members with extensive education, outreach, and guidance on implementing these recommendations by the goal year. www.producetraceability.org

“Some producers say ‘I already have a traceability solution,’ what they mean is they have internal traceability ... The goal of whole-chain traceability is an industry-wide effort where any player in the supply chain can rapidly trace back and trace forward using a common language to get instant information about a product.”

—ELLIOTT GRANT, CMO, HarvestMark

HarvestMark 



CONTACT US

To learn more about traceability and how GS1 US can support your company, visit www.gs1us.org/sectors/fresh_foods and/or contact the GS1 US Fresh Foods Customer Service Team at +1 937.610.4234.

ABOUT SUNFED

SunFed is a privately held full-service produce company with headquarters in Nogales, Arizona. SunFed is devoted to providing the highest quality fruits and vegetables, produced by the world's finest growers, packed and shipped under its own label throughout North America. This commitment and discipline has created a reputation for providing vegetables and melons with extended freshness and consistent eating quality. www.sunfed.net

ABOUT GS1 US

GS1 US is a not-for-profit organization serving more than 25 industries in the United States by facilitating industry initiatives, administrating the GS1 System of standards, providing education and support, and connecting communities through events and online forums. GS1 Standards make it possible for companies to identify, capture, and share information about products, locations, and more. www.gs1us.org

ABOUT HARVESTMARK

HarvestMark is the industry-leading fresh food traceability platform from YottaMark, Inc. To date, more than 3 billion packages of fresh food have been enabled with HarvestMark traceability, from the produce aisle to the meat case. Designed for a wide range of fresh products, the HarvestMark platform supports industry standard case- and pallet-level traceability. HarvestMark for items extends the platform to individual sales units, tracing from farm to fork, helping reconnect shoppers with the people who grow and sell their food. HarvestMark solutions speed food safety communication and enable unparalleled insight into the fresh supply chain. The HarvestMark platform supports more than a dozen harvest and production workflows and open integration with existing systems. HarvestMark is a GS1 US Solution Partner. www.HarvestMark.com



THE GLOBAL LANGUAGE
OF BUSINESS

CORPORATE HEADQUARTERS
Princeton Pike Corporate Center
1009 Lenox Drive, Suite 202, Lawrenceville, New Jersey 08648 USA
T +1 937.435.3870 E info@gs1us.org
www.gs1us.org Connect with the GS1 US community
at www.UConnectCommunity.org

[twitter](#) [Linked in](#) [YouTube](#)