Creating Value from Traceability

Safeguarding animal health is the most important reason for implementing a traceability system that includes individual animal ID, but that doesn’t mean there aren’t other benefits, too.

Story & photos by Meghan Richey

If you personally expect to derive value out of a traceability system, you need to be able to answer the question “What’s in it for me?” before you start, says Yvonne Tollens, co-owner of ComputerAid Professional Services, an Alberta, Canada-based company whose software handles records for more than 2 million cattle each year.

Traceability is needed for many reasons, she says. “The USDA (U.S. Department of Agriculture) and the CFIA (Canadian Food Inspection Agency) need traceability for controlling diseases that impact animal health and food safety,” she explains. “The national cattle industry needs traceability for access to domestic and international markets. And private value chains need traceability to improve profitability and return value from total chain participation. These are the benefits of a traceability system on a macro level.”

Producers, auction markets, stockers, feeders and packers need to answer at the individual level what traceability offers them, Tollens says.

“Failure to answer that question by the individual market segments can lead to lack of participation, data integrity questions, failures to update data, higher auditing costs and poor compliance,” she cautions. “Solutions are found at the micro level.”

She suggests identifying the primary person to observe, create, measure and use the information to be collected, and how to help that person do his or her job easier, better, faster and simpler.

“Creating value from traceability is all about understanding the right incentives for each person,” she explains.

Service to consumers

The agriculture industry must overcome its “traditional, defensive posture regarding traceability” and recognize the value opportunities it presents for risk management, particularly disease management, says Earl Dotson, president and chief operating officer (CEO) of Validus, an Iowa-based third-party auditing company whose core focus is on-farm production agriculture.

“Instead of putting all of our focus on the cost of the traceability system, we need to also focus on growth opportunities for products, recurring revenue and added value for a product,” he says.

Dotson says there are three reasons to do an audit: managing risk, adding value to products and increasing product market share. “If you implement auditing to pacify activists then it’s a waste of money. It has to be about your desire for the benefits of traceability.”

Public trust is declining, Dotson says, but
traceability and audits can help rebuild consumer confidence.

"Why wouldn't consumers be confused, suspicious and doubtful?" he asks. "Look at the number of high-profile recalls — at least 12 — we've had from winter 2006 to summer 2007." As examples, he lists pet food, spinach, chocolate, rice, lettuce, chicken, green onions, mushrooms, doggy jerky, baby food, peanut butter and lead paint on toys.

In this state of heightened awareness, Dotson says that a new type of consumer is evolving who will require the marketplace to become traceable and auditable. He says the new consumer is "enlightened, empowered, skeptical of the current system and has a new set of drivers that influence purchasing decisions."

"The new consumer will require more information in the future," he adds. As examples of consumer concerns and desired information he lists four areas:

1. **Product and packaging:** Does it deliver a health benefit? Does it contain trans fats? Is the packaging recyclable?
2. **Retailer:** Does it stock healthy products? Are employees paid fairly? Do I "feel good" shopping here?
3. **Company:** Is it environmentally sensitive? Is management responsible? Do actions match its message?
4. **Suppliers:** How are animals treated? Are growers paid fairly? Do they care for the environment? Are operations certified?

Dotson says that agricultural producers have not traditionally been responsible for answering these consumer concerns, but that is changing, and traceability can help. "Validus and other companies can do audits, but we must be able to assure the customer that the product they purchased is covered by the audit. In that capacity, traceability becomes important to us," he explains. "There is huge opportunity here for product traceability to answer consumer concerns to gain market advantage or add value to products."

Validus works with producers and retail customers to use a traceability system that will safeguard the food supply; address socially responsible production and other nonproduct attributes; protect brands; provide accountability for each segment of the supply chain; provide the trust, accountability and transparency necessary to instill consumer confidence; and allow consumers to "feel good" about the products they buy.

"This traceability system records, certifies and verifies all activities involving the product or ingredient, including locations and owners in all the steps of the supply chain," Dotson explains. "Traceability is a means of supplying consumers with more information and allows producers, suppliers and retailers to enter new high-value markets."

**Enabling continuous improvement**

"We look at things from a long-term perspective and strive for continuous improvement, because that’s where the money is at — continuous improvement," says Chuck Fries of AzTx Cattle Co. of Hereford, Texas, the largest family-owned cattle feeder in the United States.

Fries explains the relationship between value, improvement and traceability this way: "Without traceability you don’t have the tools to identify ways to continually improve. It’s that continuous improvement that creates value, but at the foundation of creating value is people: it’s about relationships. That’s the only way we can add value for the long term is by working with people."

"The greatest software packages, the greatest ear tags, the greatest technology out there is useless unless we have people who want to work together with the same vision and commitment to make it happen," he continues.

Value should be created within a traceability system, and radio frequency identification (RFID) tags are just one part of that system, Fries says. "RFID tags should come with a warning that says the devices do not contain magical powers to retrieve information and deliver it to your ranch’s front door while you’re sleeping at night. It doesn’t guarantee anything, but it does provide you with the means to take action to create valuable information."

When working to create value, Fries says that AzTx looks beyond simple price premiums. "Premiums are important; they can be a source of real dollars in the bank, but they aren’t the only way to add value," he says.

He explains that early adopters earn value in premiums, but late adopters can still earn value by avoiding discounts that would be incurred had they chosen not to adopt at all. "The problem with people who lag behind in adding value is that over time, through changes in the supply chain, those premiums tend to turn into discounts," Fries says. "Today, added value for an early adopter in the case of age verification might be $25 a head, but later down the road the value of age verification might be avoiding a 25¢-per-pound discount."

He explains that there are three ways to get added value: you can increase revenue, you can decrease current production costs, and you can avoid future costs.
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“To claim you have added value, all three of these have to be quantifiable with actual dollars you can put in the bank. As far as we’re concerned, if it’s not quantifiable, it’s not added value,” Fries says.

Traceability can be a tool to identify value opportunities across the entire supply chain, Fries claims. But if it’s not a win-win for all parties involved, he cautions that it’s not going to last very long. Producers, feeders and packers need to think of ways to help the next person in the supply chain make money.

“We need to stop the cannibalism attitude of the beef industry and start working together to use traceability to create continuous improvement and value,” he adds.

Fries gives the example of making genetic changes at the ranch level to benefit the entire supply chain. He explains the simple sequence that better genetics can perform better on grass, perform better in the feedyard, perform better for the packer and ultimately perform better at the retail level.

But value discovery is a long-term process, especially with genetic improvements, he says. For example, take a producer who uses traceability to receive carcass data. “By the time he gets the carcass data back, there’s already another calf on the ground, and the cow is already rebred. It’s important that he has that information to discover the value of those genetics, but he’ll have to wait two more calf crops until it can be put to work. It takes time to make improvements,” Fries explains. “But there has to be traceability up and down the chain to identify that added value and track it through each step of the chain.”

At the ranch of origin, Fries says, traceability can be used to identify and trace percent calf crop, herd health costs, selling price, pounds of beef produced per acre, annual cow costs, percent death loss, and value and cost of genetics. At the feedyard, traceability can be used to identify and trace health treatment costs, average daily gain (ADG), feed efficiency, percent death loss, cost of gain and marketing options. For the processor, he says, traceability can be used to track quality grade, yield grade, dressing percentage, percent retail product and marketing options. At the retail level, traceability supports safety, consistency, quality, product options, marketability and shelf life.

“When you identify something that works, you want to replicate it to continuously improve and create more value. When you identify something that doesn’t work, you want to avoid it so you can continuously improve and create value by avoiding future costs. Traceability enables that value discovery and continuous improvement,” Fries emphasizes.

He offers the following example about using RFID to create value through cost avoidance: Last December, during bad weather, AzTx received 1,100 calves from 12 origins that were all supposed to be following the same 45-day preconditioning program. The first day alone they had three deaths and treated more than 80 animals.

“Because of traceable RFID tags, we were able to identify and track 100% of the dead cattle and 65% of the treated cattle to one ranch out of the 12,” Fries explains. He says they used that information to create value by avoiding future costs. Traceability allows you to continuously improve by seeing value that your eyes cannot.

Making it pay

With more than 28,000 head of cattle spread throughout a large geographic area, Padlock Ranch, Ranchester, Wyo., thought it had plenty of excuses to avoid implementing a traceability system with individual animal identification (ID), Wayne Fasholtz says.

“We claimed that it would take too much labor and be too expensive. We said, ‘We don’t do things that way here.’ But then we finally realized that it is the right thing to do. So we found a way to make it pay.”

When they started out, Fasholtz says, topics of discussion included what manufacturer’s system they would use, how it would work with large numbers, if the modern technology would be compatible with the traditional mind-set of the ranch staff, and how extreme weather would affect the technology’s performance.

After doing research to answer those questions, Padlock Ranch dove into animal ID headfirst by tagging all of its cows with radio frequency identification (RFID) tags. Next, they tagged all calves. They met challenges along the way but overcame them with creativity, Fasholtz says. For example, theft problems in remote areas motivated them to find RFID readers that were easily transportable from facility to facility so they wouldn’t be left behind and stolen. On extremely cold days, they’ve even used gas barbecue grills to keep RFID tags warm.

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“You can’t find the source of problems without traceability,” Fries says.

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