

Food makers ask: How much traceability is enough?

Do you have sufficient breadth, depth, and precision to make a difference?

by *DIANE MURRAY*

Even though traceability is legally required for all consumer foods and beverages, and some giants have achieved a significant capacity to trace, small and mid-size firms still struggle to balance compliance and cost. Producers that have never experienced a recall, food safety lawsuit, or FDA enforcement often miscalculate coverage needs. As a result, many businesses don't realize vulnerabilities in traceability until faced by crisis.

All sizes of manufactures ask the same questions: "How much traceability is enough?" and "Which approaches will protect my business?" However, small- and mid-size producers agonize over affordability as well. It all boils down to traceability objectives, and the characteristics of your production process.

EXAMINE OBJECTIVES — Other than compliance – either government or industry standards – what else do you want traceability to do for your business? The benefits of traceability can extend beyond risk management. For most consumer food makers, it also translates to reduced system cost and larger net revenue.

Spend some time thinking about traceability from different angles, and consider asking other stakeholders what traceability can do in terms of sales and marketing, operations, finance, legal and other perspectives. For example, do you want to use traceability to improve supply management? Can you lower distribution costs or speed time-to-market? How about marketing foods that have subtle quality attributes?—Can you use traceability to differentiate and expand sales of products with characteristics that are difficult to discern? Set a goal to make your traceability investment pay for itself within a reasonable amount of time by enhancing the bottom line.

MAP REQUIREMENTS — Processes and systems for traceability should mirror both compliance and business needs. Of course production process characteristics are important, but shouldn't dictate or detract from overall objectives. Decode traceability breadth, depth, and precision first in terms of objectives, then map manufacturing process and system requirements accordingly.

Breadth of traceability refers to how much information you want and need to collect. Even for unprocessed foods, cataloging all attributes would be an enormous, unnecessary undertaking. For example, for fresh eggs, how many chicken breed classifications are necessary to effectively market the final product?—Maybe just a few, or perhaps more. Either way, it's probably very important to know color, size, grade, organic versus non-organic, cage-free versus battery cage, and so forth. Diverse characteristics can mean very different requirements across the many food and beverage sectors.

Depth of traceability relates to how far back or forward the system tracks relevant data. For recalls to be effective, companies need to be able to trace ingredient sources and product distribution. Do you also need to know about benefits or hazards like feed or fertilizer all the way back to the farm? Is it possible that someone would care where your supplier got his packaging? How about moving forward in the system? Perhaps there's value in knowing whether a certain item ended up in the hands of a restaurant commissary rather than a big box retailer.

Precision in traceability is the degree to which you can pinpoint a particular product's or ingredient's movements and characteristics. Sometimes temperatures are important, while other times expiry dates take precedent. How often, at which touchpoints, and how should temperatures be measured? Does there need to be a defined process for alerts on temperature or handling violations? Who is qualified and has adequate permissions to perform quality checks?

Each of the traceability dimensions – breadth, depth, and precision – has the potential to enhance or diminish food safety, compliance and business results. How businesses collect, store and analyze the information is just as important as deciding which data is the right data.

CHOOSE THE RIGHT SYSTEM — Food makers that balance cost against objectives and requirements are able to eliminate deficiencies and improve competitive advantage. Time to value depends on the approach to gather, maintain, analyze, and distribute data. Certainly, the faster and more precise the tracking system, the faster you can identify and resolve food safety, quality, and supply chain issues.

Top-tier systems that are uniform applied across all sectors (within and outside the food industry) are likely to be costly and less effective than those that recognize and handle the unique characteristics of different sectors within the food and beverage industry. The greatest advantage is flexibility to adjust to changes in production and fluctuating demand. While out-of-the box integration specifically for the food and beverage industry is available and economical, many companies still perceive it to be out of their financial reach.

It's true that some manufacturers may not benefit from an investment in an automated system. Many however, due to size or budgetary concerns perceive that they cannot afford to automate. Others fear that they don't have adequate IT resources to implement or maintain an automated system. These businesses often underestimate the value they might achieve from an appropriate traceability system.

Consider this: when the FDA knocks on your door, how long will it take you to put your hands on any given record? Or, if a recall should occur, how many hours' or days' worth of product will you be forced to reclaim and discard?— even worse, how many production hours or days will you lose if your staff is forced to focus on the recall, or has trouble discovering the problem? Businesses that quantify traceability value in terms of throughput (the rate at which a company generates money through sales), competitive advantage, and risk mitigation conclude that an appropriate traceability system pays for itself in just weeks or months.

Today's market offers a wide variety of systems to meet traceability needs. Everyone's short list should include systems that are designed specifically for the food and beverage industry. Many producers also look for the ability to quickly and inexpensively expand or configure their system as the business grows and changes. They also benefit tremendously from systems that allow them to seamlessly connect to push and pull data to and from every other system of record throughout the business. These systems might include manufacturing execution, manufacturing intelligence (performance metrics), accounting, CRM, and others. In fact, some manufacturers don't even realize they already have the ability to satisfy some or most of their traceability requirements within their existing ERP system.

Only you can decide how much traceability is enough. Ultimately, the dangers and rewards – to you and your customers –will dictate the outcome.

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