Produce Traceability Technology in Focus

How to Ensure Food Safety from Farm to Fork

Vision33

Introduction

In Fall 2018, the Food and Drug Administration (FDA) and the Center for Disease Control (CDC) began an investigation into the source of an E. Coli outbreak affecting 59 people in the US and Canada. The ongoing investigation led to a broad advisory that no one should consume romaine lettuce because of cases of E. Coli believed to be linked to its consumption. As the FDA and CDC continue working in tandem to pinpoint where the contamination originated, food and beverage manufacturers in the US could find themselves caught in the cross fire of the organizations' effort to protect the public from outbreaks of food borne illness.

How The Recent E. Coli Outbreak Affects All Food and Beverage Manufacturers

Today, it's an E. Coli outbreak linked to romaine lettuce but tomorrow it could easily be a listeria outbreak in deli meat processing or contaminates entering dairy production. In either case, manufacturers that are unable to provide buyers or regulatory bodies in the industry with information about their products' origin, where they were distributed, or how they were produced can present significant risk to the manufacturer.

In the case of the romaine lettuce, the CDC is warning consumers, retailers, and restaurants to throw away any purchased lettuce products, regardless of whether they have experienced any incidents of E. Coli food poisoning as a preventative measure. Where romaine lettuce's origin is not easily determinable, the CDC is recommended that consumers avoid its purchasing and consuming the product – when in doubt, throw it out.

The Difficulty Realizing Produce Traceability

While several of the larger US producers of romaine lettuce have agreed to label their products to indicate where and when their romaine lettuce was grown, there are many smaller producers whose business management systems do not possess produce traceability to do so. Downstream of your supply chain where buyers and consumers are faced with a lack of information about where their food and beverage products come from may mean choosing to avoid them altogether.

But the implementation of product serialization faces several challenges before realizing traceability: How do you track your products as they leave your warehouses and enter a complex, global supply chain? How do you enable collaboration with thousands of stakeholders? How do you keep pace with changes in the industry's regulatory environment? how do you share your unstandardized data your supply chain partners need to do business with you? Lastly, how can your small to midsized enterprise (SME) afford this traceability technology on a shoestring budget?

Is There an Affordable Solution?

Luckily for food and beverage manufacturers, there is. The democratizing effect of enterprise technologies like enterprise resource planning (ERP) solutions means that access to traceability technology is no longer limited to the large enterprise food and beverage manufacturers. Now, even the smallest producer can maintain accountability for their food and beverage products with a system that supports business operations and supply chain traceability.

Technology in Focus: Produce Traceability

Produce traceability technology is simply put the system that enables a food and beverage manufacturer to track item's movement throughout the business and its warehouses as well as externally once it enters the supply chain. This process allows manufacturers and distributors to maintain better inventory accuracy and ensure compliance with customers or industry requirements.

However, many traceability systems are only designed for internal purposes, providing a one-up, one-down view for the company using that system. Many companies, particularly those that do business with large retailers that have strict standards for traceability, will quickly find themselves outgrowing manual methods or standalone programs for batch or lot tracking.

At this point, ERP solutions with support for strong batch or lot traceability features become the recommended solution. Additionally, an ERP solution serves as a business management system, integrating all the key functions you need to provide clear visibility into your entire operations. By capturing data into a single centralized location, you can access critical real-time information to make fast, informed decisions.

How SAP Business One Can Help Food and Beverage Manufacturers Achieve Traceability

SAP Business One is financial systems leader SAP's flagship ERP solution for the midmarket. It is a complete software system for growing SMEs in the food and beverage industry that need support for product traceability. SAP Business One, along with enhanced capabilities provided by solutions partners, allows you to produce and distribute fresh and packaged food products while minimizing risk through industry guideline compliance, as well as internal and external supply chain traceability.

Traceability Technology Features

SAP Business One is a complete business management solution that integrates all core business functions across your entire company – including financials, sales, customer relationship management, inventory, and operations. Adopting SAP Business One for food and beverage manufacturers also provides access to traceability technologies that will ensure that you can meet industry guidelines, so you have time to focus on what's important: freshness, product quality, and customer satisfaction.

How to Meet Industry Standards Food and Beverage

Initiatives like the Produce Traceability Initiative (PTI) were designed to help the industry maximize the effectiveness of current trace back procedures, identifying every step of the supply chain for distributors. With huge support to advance food safety, this initiative aims to develop a standardized industry approach to enhance the speed and efficiency of traceability systems for the future. SAP Business One for food and beverage manufacturers enables you to easily meet these guidelines.

Standardized case labels can be used by resellers to scan inbound, outbound product shipments, or both. This shows suppliers when they received it, what vendor they received it from and can ultimately trace it back to where the product was made or grown. Two supported labels that increase the speed and accuracy of data captured throughout the supply chain that are supported in SAP Business One for food and beverage manufactures include GTIN labels and GS1 Barcode Labels. Here's how they help your food or beverage manufacturing operation achieve compliance:

GTIN Labels
The Global Trade Item Number (GTIN) is used for uniquely identifying trade items, which includes products and/or services that are sold, delivered and invoiced at any point in the supply chain. The GTIN allows organizations to identify trade items at all levels of packaging (item, case, and pallet) as well as accurate machine reading of those trade items when placed into GS1 barcodes.

GS1 Barcode Labels
Through GS1 labelling and accurate shop floor data collection, your company can obtain easy and fast access to accurate, real-time data for complete visibility of your supply chain.

GS1 Logistics Labels
Encrypts all information that supply chain partners want to exchange, include batch number, best before date, weight, country of origin, production date and packaging date.

Case and Crate Labels
Some products can be more easily tracked at case level than pallet level, particularly for small orders, flow-rack items and hand-stacked cases. Human-readable information, along with a GS1 barcode, is included on each label.

Production/Processing Labels
SAP Business One for food and beverage manufacturers registers this new product as a receipt from production and consumes the original produce that went in it. It automatically generates the required production/processing labels and keeps track of the genealogy of the finished product.

Quality Assurance
With FEFO picking by expiration date and shelf life you can trace the quality of your goods at every step of the supply chain from supplier to customer.

Warehouse Location/ Bin Location Labels
Defining a warehouse with locations improves inventory management by increasing accuracy and speed for picking, packing, warehouse movements, put-away and shipping.

Benefits of Adopting Traceability Technology

Underlying the global food and beverage market is a complex supply chain, often characterized by customers' expectation. Highly networked and multi-tiered, when risk occurs, it can extend a ripple effect throughout the supply chain.

Customers want more information about the products they are purchasing, and businesses need to be prepared to meet not only customer demands, but also strict industry requirements. Understanding the industry and better managing the risks and challenges can help businesses stand out amongst the competition.

Real business growth occurs when owners have access to critical information, respond to change, and prepare for possible challenges. Understanding how business technology like ERP and traceability can optimize food safety and inventory control is the first step to reduce risk and ensure your company will remain current and competitive.

Benefits

- Easily comply with strict industry standards and GMP guidelines including FDA, EMA, BRC, IFRA, GHS, etc.
- Manage shelf life and expiry dates by tracking byproducts and coproducts, yield, waste-age, shelf life, expiry date, FIFO and FEFO.
- Track your materials backwards and forwards from vendor to customer.
- Calculate costs with flexible, multilevel margin calculations per article, production order, and batch.
- Eliminate waste and minimize delays with advanced quality controls on both raw materials and components.
- Improve planning, communication and responsiveness with advanced scheduling and production controls.
- Make faster, more informed decision with real-time reporting, dashboards and alerts.
- Easily integrate with subsystems such as SCADA, LIMS, and more.

Supply chain traceability is what empowers consumers to trust brands. When there is an opportunity to help the consumer understand where their food is coming from or convince your supply chain partners that you can take accountability for your products, manufacturers can further differentiate from the competitors.

Through produce traceability, manufacturers can obtain visibility at each step of production including farming practices, distribution paths, storage procedures, and product delivery. It's these forward-thinking companies that look beyond the absolute minimum requirements for industry guidelines, whose investment in traceability technology today will bear fruit in the form of customer trust and brand loyalty tomorrow. When a case of food contamination occurs in the industry, your business will be ready to handle it and assure customers of food safety from farm to fork.

Learn more About SAP Business One for Food and Beverage Manufacturers

Vision33's in-depth experience with manufacturers in the food and beverage industry, and other regulated industries means that you get world-class expertise working for you. SAP Business One for food and beverage manufacturers can quickly and easily identify all steps throughout the supply chain, from purchasing, receipt and storage of goods, labeling, route planning, inventory management, production and packaging, to the eventual dispatch of your products.

Take the next step towards standardized traceability technology. To discuss your business' planned system approach to meeting food industry regulations or to schedule a product demonstration, please contact us at: contact@vision33.com. For more information on SAP Business One, visit us at www.vision33.com.

About Vision33

Vision33 Inc. is a global IT professional services consultancy that solves customer business challenges through the promise of technology and the value it delivers. We partner with growing and large organizations in both the public and private sectors to understand their vision and help them reach it with the right blend of strategy, consulting, and technology. Vision33 global team of results-driven resources provide world-class experience through our office locations in North America and Europe.

Vision33's SAP solutions provide scalable and integrated enterprise resource planning (ERP) technology to growing enterprises. We work with customers to connect their business processes from finance and expense reporting to procurement and inventory – transforming their operations and better managing subsidiary operations – no matter the size of their business. Vision33's dedicated customer support program, Vision33's world-class TOTAL Care support program ensures you have the tools needed to fully leverage your investment in technology.

Vision33's eGovernment practice delivers the right approach, expertise, and people to public sector clients to empower our government clients to be successful with technology. We have experts in the technologies and methodologies that are of most value to you. Working in partnership with Vision33, we will help you optimize your technology investment, delivering government services efficiently, reduce costs and improve overall citizen satisfaction.

For More Information

When you're ready to take the next step, speak with a local, qualified Vision33 consultant in your area.

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