

THE COST OF COMPLIANCE: WHAT FOOD AND BEVERAGE MANUFACTURERS MUST KNOW TO AVOID PAYING THE ULTIMATE PRICE



INTRODUCTION



Today, food manufacturers are facing tougher challenges than ever before. The food industry has become increasingly complex for manufacturers to navigate and remain compliant. Heavily regulated standards for checks and balances on quality assurance and evolving regulations have impacted manufacturers in this particular industry, like never before. Their survival depends on their ability to remain compliant and competitive. The risk of not being well-prepared means that these companies could pay the ultimate price.

In order to meet the Food & Drug Administration's requirements for recordkeeping and lot-traceability, food and beverage manufacturers must be able to track and identify every single ingredient consumed in the manufacturing process; from receipt of initial ingredients through processing and manufacturing, to packaging and shipping the final product to the end-customer.

Manufacturers are also being forced to accelerate time-to-market, despite being faced with constant changes in tastes and trends in a regulated industry.

Pricing competition amongst food retailers in mature markets, along with the weakened worldwide economy, have also lowered company profit margins and resulted in rapid food industry consolidations. Large retailers are demanding increased visibility and better results from their supply chains, as food product recalls carry enormous financial consequences, as well as, the potential to damage brand equity. These industry pressures are forcing food manufacturers to introduce better food chain traceability and quality management standards than ever before.

INTRODUCTION



As large operators and retailers gain more power, food manufacturers have less control over prices. Raising prices is no longer an option to fix falling profit margins. Manufacturers must either accept lower profit margins, or increase efficiency and decrease costs. Cost management demands accurate and detailed cost analysis.

As industry regulations evolve, your company may fall out of step with adequate compliance measures based on current operational procedures.

For manufacturing companies who are unable to adjust their operations to meet compliance standards, the costs—both tangible and intangible—can be detrimental.

The price of being non-compliant can include:



Lost orders, customers, and revenue



Regulatory fines, customer penalties, and other potential fees arising from lawsuits or public relations services for damage control



Irreparable damage to your company's brand reputation

These demands and constraints are driving food manufacturers to look for solutions to facilitate business process re-engineering in order to eliminate unnecessary processes, increase overall productivity, and comply with government regulations.

INTRODUCTION



So how can today's food and beverage manufacturers avoid the pitfalls of regulatory compliance complexity?

How can you stay one step ahead?

The answer is simple.

A well-defined compliance strategy that includes the right measures, systems and technology, that can be executed, monitored and measured for the survival of your business.

The detailed information required for regulatory compliance can serve as a foundation for improved costing procedures by food manufacturers and result in greater profitability.

By understanding the business processes required for compliance, the challenge of compliance can become an opportunity for business gain. In the highly competitive food market, competitive gain is often tied to how well the business is managed.

Compliance can be used to improve the management of the business.

This informational guide, designed specifically for manufacturing leaders in the food and beverage industry, provides a brief overview of:



Challenges in the food and beverage industry



Business solutions for improved compliance



Enterprise Resource Planning (ERP) and SYSPRO

CHALLENGES IN THE FOOD AND BEVERAGE INDUSTRY



Critical issues facing the food industry include heightened levels of regulation in the form of quality, documentation and traceability; customer demands for variety and innovation; low profit margins; and shelf life management.

Consistent quality of raw materials cannot be guaranteed, necessitating dynamic recipes and variable processes. Forecasting in the final stages of production centers around packaging sizes.

Demand is driven by food consumption, which depends on population growth and demographics. Company profitability is dependent on efficient operations because products are commodities subject to intense price competition. Large companies have advantages in distribution operations.

For food manufacturers, compliance stems from five key areas:



1. Food Safety and Regulatory Compliance



2. Product and Raw Material Traceability



3. Supply Chain Management



4. Forecasting and Planning for Improved Visibility



5. Reducing Inventory Levels and Improving Customer Satisfaction

CHALLENGES IN THE FOOD AND BEVERAGE INDUSTRY



1. Food Safety Regulations

Food safety is the primary concern of consumers with Salmonella, E.coli, SARS, mad cow disease, and genetically modified organisms cropping up around the world. More than 76 million illnesses are caused by food contamination every year in the United States.

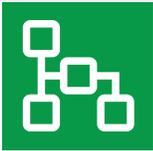
Government food safety regulations are not confined only to aspects such as expiration dates and packaging, but also extends out to traceability of the product, throughout the entire supply chain—from raw materials through manufacturing, to shipment and final store delivery. The ability to track (farm to fork) and trace (fork to farm) details per product, or per lot, is critical in the food industry. Tracking begins when raw materials are received. The date and time of receipt is recorded along with the product name, shipping data and lot number. For a manufacturer, consumption must be recorded to link the consumed material to the end-product lot. This includes ingredients, packaging materials, and all equipment that touches the product.

The operating personnel who are involved in the manufacturing or distribution process should also be tracked. The key people are those who receive the material and those who run the process, since they have the greatest impact on the safety and security of the final product. For food manufacturers and distributors, shipping information must be recorded, including lot numbers and selected shipping details. The ability to trace ingredients, parts, and lots to the source is very important in the food industry.



With the U.S. Food and Drug Administration (FDA) having authority over more than 80% of the U.S. food supply, the U.S. Bioterrorism Act of 2002 has more impact on the worldwide food industry than all other regulations combined. The Bioterrorism Act pertains to all companies that manufacture, process, pack, hold, transport, distribute, or receive regulated food products. The Bioterrorism Act has significant impacts on food manufacturing operations.

CHALLENGES IN THE FOOD AND BEVERAGE INDUSTRY



2. Product and Raw Material Traceability

Lot traceability of raw materials is required by the FDA and USDA. Global initiatives and U.S. regulations related to raw material and finished product tracing have been strengthened during the past few years.

The increasing need for food manufacturers to focus on compliance and traceability initiatives is significant across the globe—as commercial pressures grow to meet regulatory mandates.

Traceability allows manufacturers to “guarantee” the origin of a product or raw material. It therefore allows them to reduce the risks they face—where an incident has occurred, by more quickly searching impacted products and removing from the marketplace—as and when required.

By mitigating the risk of product recalls, reducing manufacturing costs, and quality controlling end-to-end traceability of processes, food manufacturers will also be able to successfully reduce inefficiencies within their supply chain.

Another vital factor is the need for food manufacturers to use traceability to better manage customer relationships. By leveraging it, it helps reduce the time required to react to customer complaints—driving higher levels of customer satisfaction.

Traceability also acts as an analysis tool for continuous improvement strategies; enhancing the quality of on-going processes and, as a direct result, the quality of the service or solution they are developing. Traceability helps manufacturers improve the efficiency of quality controls—while at the same time, reducing costs.

CHALLENGES IN THE FOOD AND BEVERAGE INDUSTRY



3. Supply Chain Management

Supply chains have grown more complex than ever before. Manufacturing companies now rely on global, multi-tier supply networks for everything from supplying raw materials to delivering end-products to the customer. This makes managing your supply chain more difficult, and opens up the possibility for non-compliance issues—at many more stages in the manufacturing process.

Consistent supply of quality raw materials for the food industry is missing with improper handling and transportation systems—and a potential for productivity loss. In today's competitive market, food suppliers are expected to prove that they can consistently deliver high-quality products to ensure they do not put their customers' brands at risk. Considering recent high-profile food contamination events in the news, many food processors now find themselves measured on their ability to help customers protect their brand equity and protect those of their suppliers in the supply chain.

Historically, food processors have competed for business based on metrics such as price, product consistency, and customer service. In today's highly competitive market, the processor that can demonstrate the most reliable means of brand protection can have a significant competitive advantage. The demands for brand protection begin at points closest to consumers in the food chain and then cascades back all the way to the food source. Every participant in the supply chain assumes the risks of poor quality control—regardless of which partner in the supply chain may cause a problem.

One of the ways that food processors are being tested for brand protection is through food safety audits and mock recalls. Many processors that supply the national retail chains are now conducting mock recalls on a quarterly basis. For a food processor, the cost of a failed mock recall can be catastrophic. Compared to the initial warnings that might be imposed by the FDA, a customer may switch to another supplier based on the failure of even one mock recall.

CHALLENGES IN THE FOOD AND BEVERAGE INDUSTRY



4. Forecasting and Planning for Improved Visibility

The disconnect between sales and operations (and supply chain initiatives) on what should be produced and when—and where it's needed, is a very common challenge for food and beverage manufacturers.

The lack of successful supply chain coordination and visibility can lead to frequent changes in production schedules, expedited transfers and shipments, excessive stock-outs, erratic levels of customer service, lack of visibility into future demand, and inventory in the wrong place—and at the wrong time.

For many food and beverage manufacturers, these problems are not new. They stem from a lack of shared knowledge about the supply chain function, inadequate planning, and unavailable or inconsistent data due to lack of integration to the core business systems.

Part of the challenge many food and beverage manufacturers face, is a lack of understanding of formal planning and forecasting techniques. Very often, key decision-makers have little formal training in the areas of forecasting, inventory planning, production planning, distribution planning, or scheduling processes.

An understanding of forecasting techniques and processes are essential in today's highly competitive food and beverage industry. A greater knowledge of forecasting techniques and the systematic process of forecasting can improve forecast accuracy and credibility. The right mix of strategy and systems can have a very high impact on a manufacturer's overall operations—and ultimately its bottom line.

CHALLENGES IN THE FOOD AND BEVERAGE INDUSTRY



5. Reducing Inventory Levels and Improving Customer Satisfaction

Food and beverage companies are constantly introducing new products, adding variations to recipes and ingredients, and adjusting package sizes to increase sales. Most food manufacturers have zero margin for error. Especially considering that their products are stamped with ingredient listings and expiration dates. When a major supermarket chain receives a shipment of the wrong product, that's when business is lost.

More so than any other manufacturing sector, food is a business in which it's critical to deliver the right product—at the right time. Your customers expect the product to be available when they want it.

Inventory is both the problem and the solution to many challenges. Too much inventory and not enough of the right product—at the right time is a common complaint. That's not only a carrying cost, but also results in operating expenses with supermarkets, whose contracts impose financial penalties for late or incomplete deliveries.

Having a successful supply chain management strategy, with a dedicated planning and forecasting solution, helps food manufacturers to launch new products successfully, meet seasonal shifts in demand, and transition to new packaging standards such as container sizes—in order to remain competitive in retail spaces.

BUSINESS SOLUTIONS FOR IMPROVED COMPLIANCE



Automated Traceability

To address the brand protection and mock recall demands of customers, automated traceability systems have become a requirement for food processors—up and down the food chain. For many food processors, their current challenge is to find a solution to traceability that is both cost-effective and a good fit for their current business operations. With an automated system for traceability, incoming materials, manufacturing operations, inventory management, and customer shipments, are all traced in a manner similar to an established accounting system.

In an accounting system, the general ledger (GL) serves as the central repository of all financial transactions. In automated traceability systems, the electronic batch record (EBR) serves as the central repository of all operational transactions. Automated operational systems are often linked directly to production lines and to inventory (through barcode and RFID systems) to help streamline the flow of critical data directly into the electronic batch record. This reduces the risk of errors during data entry, and increases the flow of information to support real-time visibility and analysis for executives.

With instant traceability, food processors can gain the confidence of customers, auditors and regulatory inspectors. By establishing the confidence of these stakeholders, food processors can establish a competitive advantage that can add measurable value.

BUSINESS SOLUTIONS FOR IMPROVED COMPLIANCE



Barcoding

Compliance requires linking ingredients to end-items. This is best accomplished by real-time recording of lot numbers, and the actual quantity consumed.

The benefits of using barcoding for data collection are speed and accuracy. According to recent studies, entering barcode data is at least 100 times faster and more accurate than traditional manual keyboard entry—producing a dramatic increase in efficiency and productivity for any operation. When barcodes are used in the business process, procedures are automated to improve efficiency and increase productivity.

Barcoding can strengthen regulatory compliance, improve manufacturing lot tracking and traceability, develop visibility into operations, and streamline and automate many of the distribution processes—often eliminating the need for additional warehouse staff.

ENTERPRISE RESOURCE PLANNING (ERP) AND SYSPRO



Successful automation and ERP technology provides the means to handle the complexities of the food and beverage industry, where the challenges of regulatory compliance and quality for products, demand for faster inventory turns and accurate deliveries, and safety issues are most critical.

The ability to manage production quality is essential to food and beverage manufacturers. Effective ERP solutions must provide the ability to track real-time data on all aspects of manufacturing and materials, and archive the data for future reference.

Quality management enables food and beverage manufacturers to track inspection results, non-conformance and supplier management, and other best practices. For transparency, the quality functions should provide seamless integration with supply chain management functions, to give manufacturers a complete view of their quality performance.

ENTERPRISE RESOURCE PLANNING (ERP) AND SYSPRO

ERP solutions help your company mitigate compliance risk by providing the right tools that you need to manage your company's operations efficiently. ERP allows food and beverage manufacturers to:



Increase transparency of operations in multiple business segments for possible issues.



Collect information across the organization in real-time to provide detailed communications to all relevant stakeholders and executives, for improved collaboration between departments and decision-making.



Optimize operations by automating key business functions including estimating, master scheduling, factory scheduling, labor performance, costing, purchasing, receiving, materials verification, capacity, and planning.



Improve visibility up and down the supply chain providing the means to expedite product recalls, should the need arise.



Manage regulatory requirements with fully-integrated processes to manage raw materials during receiving, production, packaging, and shipping phases.



Enhance customer service levels with real-time visibility across entire organization, including deliveries of the right product—at the right time, and any change orders.



Improve your bottom line by integrating financials to ensure that costs and expenses are accurately recorded, to provide at-a-glance information of the bottom line.

ENTERPRISE RESOURCE PLANNING (ERP) AND SYSPRO



SYSPRO offers you:



Design Control: Extensive design control system allows you to manage incoming/receiving and in-process inspections, electronic digital signatures, materials and quality dispositions, along with complaint tracking and non-conformance reporting.



Document Control: Maintain an accurate and up-to-date system with SYSPRO document control; engineering change controls, process instruction sheets, maintenance and repairs, as well as, health and safety standards.



Purchasing Control: Manage your approved vendor list, inspections, work in process (WIP) and audit trails, as well as, get insightful reporting on trend analysis, supplier performance and corrective actions.



Traceability: Comprehensive inventory management system enables better batch/lot and serial tracking, lot traceability, shelf life expiration monitoring, FIFO/ LIFO, bar code identification, and additional inventory and distribution control capabilities.



Compliance & Regulations: Facilitate compliance with recall processes, ISO compliance, and other stringent requirements of regulators—domestically or abroad.

ABOUT SYSPRO



Established in 1978, SYSPRO is an industry-built Enterprise Resource Planning (ERP) solution designed to simplify business complexity for manufacturers and distributors worldwide. SYSPRO provides an end-to-end business solution for optimized cost control, streamlined business processes, improved productivity, and real-time data analysis for comprehensive reporting and decision-making.

What sets SYSPRO apart is an unwavering, sustained focus on the manufacturing and distribution sectors. Combined with a practical approach to technology and a passionate commitment to simplifying business processes, SYSPRO dedicates itself to the success of its partners and customers alike.

SYSPRO is highly scalable and can be deployed either in the cloud, on-premise, or accessed via any mobile device.



NEXT STEPS:

If you want to learn how SYSPRO can help mitigate compliance risk in the food and beverage industry, contact us today at info@ca.syspro.com or +1 (888) 259-6666.