

REDUCE FOOD WASTE AND

# IMPROVE YOUR OPERATIONS





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The right tools and technology put food waste reduction and sustainability in your hands.

Food waste throughout the supply chain has been the subject of heavy scrutiny for years. From a business perspective, wasted food equates to lost profits and slimmer margins, both of which have a direct impact on a business's viability. Even small food producers and retailers may be losing thousands of dollars due to spoilage, cross-contamination, quality issues, improper storage, production loss and overstocking.

Food waste isn't just a business-critical issue – it's a growing global problem that affects companies, consumers and the planet as a whole. About 1.3 billion tons of food is wasted around the world each year, with 70% of this number never having even reached the consumer's plate. Though manufacturers aren't solely to blame (distributors, restaurants, consumers and retailers also play a role), every link in the food and beverage supply chain bears the social and environmental responsibility to minimize food waste.

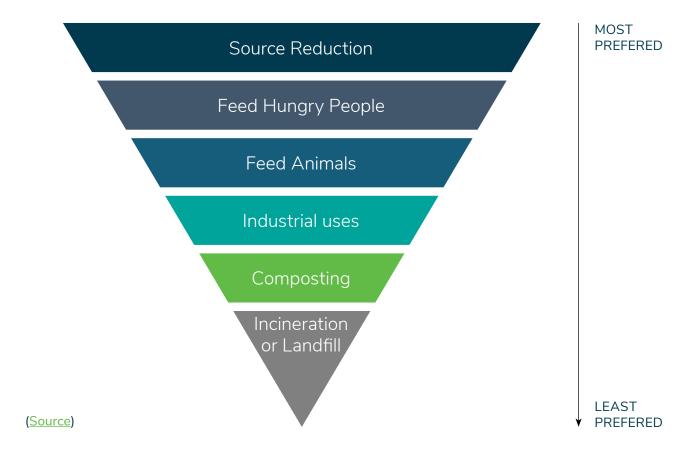


According to the latest figures available from the National Resource Defense Council, roughly 40% of the American food supply is wasted and food waste costs American businesses as much as \$218 billion each year.

According to the United States Environmental Protection Agency (EPA), the most effective way for manufacturers and processors to reduce food waste is through source reduction or reducing the volume of surplus food generated. To do this, the EPA

suggests being diligent about having tools in place to accurately measure purchasing inventory versus customer ordering, ensure proper expiration date management and streamline production practices to prevent and reduce production waste.

#### Food Recovery Hierarchy



Whether food and beverage manufacturers are concerned about lost profits resulting from wasted product or the impact on their reputation and the environment as a whole, it's apparent that to improve operations, companies must reduce food waste. In this

eBook, we outline the benefits of reducing waste, the causes of food waste in most manufacturing facilities and the ways software designed specifically for the food industry can help.

### Benefits of Reducing Waste

Many companies have adopted the idea that food waste is simply a cost of doing business. However, the alarming numbers on global food waste should make it an urgent issue rather than a given in the coming years, especially as consumers and industry regulators alike continue to push for greater sustainability.

#### **Increased Profits**

Because wasted food is wasted profits and opportunities, reducing waste can help stem monetary losses. Food can instead be put to its intended use, resulting in greater revenue for essentially the same amount of work. The benefits to a company's bottom line could be exponential when less food goes to waste and more food products make it all the way to the end consumer.

For example, if a company's food waste could have been used to make 100 extra products, companies shouldn't only concern themselves with the costs of wasted goods, but also the missed revenue opportunities those 100 extra items represent. The costs to produce 100 additional items might not amount to much, and the additional revenue could more than make up the expense.

#### Positive Brand Image

There are also potential benefits to brands that actively support food waste reduction. Consumers are increasingly holding companies accountable for promoting sustainability within their operations. They're demanding greater product traceability and setting expectations for companies to get food waste issues under control.

According to CSG's 2019 Retail and Sustainability study, 68% of consumers consider the sustainability aspect when making purchases. Gen Z shoppers are increasingly scrutinizing sustainable

practices more than any other buyer group. They're driven by more than price and look beyond the product itself to connect with the brands behind the products.



According to CSG's 2019 Retail and Sustainability study, sustainability is the second biggest driver for consumers to make repeat purchases from a brand.

The trouble is that waste can easily become invisible to decision-makers because it has become normalized. However, once food waste is recognized and reduced, it can bring surprisingly large improvements in profit through reducing purchasing costs, allowing a company to produce more finished products or maintaining loyal customers.

#### Causes of Food Waste

It's easy to tell companies they need to reduce food waste, but the complexity of manufacturing operations makes it a difficult task. A crucial first step in improving efficiency is identifying places where waste occurs. Without a thorough understanding of the causes of food waste—including those that can begin long before the point of waste—it is impossible to maximize efficiency.

Identifying the most common reasons food waste occurs can help food manufacturers begin to address them.

#### **Ingredient Expiration and Spoilage**

The most obvious cause of food waste is when products either pass their mandated expiration dates or simply go bad. Although companies work hard to prevent such loss, it is widely seen as part of the cost of doing business. Better procedures and technology can help reduce expiration and spoilage by speeding up the production process, allowing less time for food to go bad. Enterprise Resource Planning (ERP) software built for the food industry can track lots and a product's shelf life using a first expiry, first out (FEFO) approach so that products aren't left to spoil before being used for production.

Most companies can manufacture goods fast enough to prevent spoilage; the real issue occurs when manufacturers are unable to move their products down the supply chain at an appropriate rate. This issue may be partially solved with improved forecasting to avoid the overproduction of products that expire before they can be purchased and consumed by the end-user.

#### Overstocking

Expiration and spoilage problems often flow from bottlenecks in distribution and stocking. Because supply and demand can fluctuate wildly in the food industry, it can be a challenge to ensure that stock levels remain appropriate. Overstocking leads to waste when companies can't sell their finished products. This is a more daunting challenge than ingredient spoilage



because increasing manufacturing speed or storage technology is not a solution. Instead, reducing overstocking requires the ability to forecast consumer or supplier demand, a difficult task for food and beverage companies relying on manual forecasting processes or outdated systems. An industry-specific ERP solution provides manufacturers with robust business intelligence tools to help companies drill down on their forecasting data and avoid overstock issues. Dashboards that compare historic fluctuations in supply and demand to real-time production models ensure you're able to forecast as accurately as possible.

#### **Cross-Contamination**

Improper storage of ingredients puts people and products at risk of cross-contamination. The potential for cross-contamination is increasing as consumers demand more foods free of allergens, GMOs or other ingredients, and companies rush to fulfill the demand. Preventing cross-contamination of microscopic substances like gluten represents a huge challenge for food manufacturers, and protocols for effectively preventing it are still being developed.

Cross-contamination is a frequent cause of recalls when affected products leak out to the public, whereas if the problem is caught before the products are distributed, the result is food waste. Better warehouse management and food safety plans help reduce cross-contamination and must be part of an overall corporate commitment to safe food handling. The tracking functions brought to you by FoodBusiness ERP make it easier for companies to manage their warehouses and processes so that crosscontamination will not occur. Better yet, our allergen tracking system makes it possible to easily segregate ingredients in the warehouse and move them out before they spoil.

#### **Production Loss**

While some food waste in a manufacturing facility is inevitable, knowing where waste is occurring in your plant is critical in developing a solution to fix it. The closer a facility is able to track and monitor the waste it produces, the more informed management can be when making decisions about production processes.

An ERP for the food industry provides endto-end visibility into your operations, making it easier to uncover inefficiencies and work to minimize the waste your business produces. Optimizing your operations and streamlining your processes ensure that your products are produced as efficiently and profitably as possible.

> Without real-time insight into product and inventory, how can companies improve traceability and mitigate the effects of production loss?

#### Lack of Downstream Intel

Food and beverage companies are focused on their internal food waste reduction, but manufacturers have a unique opportunity to become environmental stewards and curb food waste further down the supply chain as well. In a guide for food service companies and restaurants published by the EPA, it's noted that the single best way for businesses to reduce food waste is through source reduction. This not only refers to ordering less product, but also focusing on the way in which products are packaged. By doing these two things, manufacturers can avoid materials being created that were never needed. Understanding the challenges faced by buyers and end-users can be an effective step to reduce food waste throughout the supply chain.

## How Industry-Specific Software Can Help Minimize Food Waste

IT'S CRITICAL that food and beverage manufacturers look inward at their operations and create a plan to minimize the waste they produce. At a time when sustainability and the future well-being of the planet play a pivotal role in consumer buying patterns, companies that don't work to reign in their waste risk being left behind by competitors that place waste-reduction at the center of their operations.

FoodBusiness ERP is a solution built in Sage X3 and delivered by NexTec food and beverage industry experts. It includes the most commonly used features built for our food and beverage process manufacturing customers who are using it to run some of the world's most respected organizations.

Some of the largest food and beverage companies in the U.S. have joined the country's Food Loss and Waste 2030 Champions group, which pledges to reduce food loss and waste by 50% by the year 2030. (source)

With comprehensive traceability, quality and compliance, inventory management and production management features built right in, FoodBusiness ERP gives food and beverage manufacturers all the tools they need to streamline their operations, create more efficient business processes and minimize waste.







To learn more about how FoodBusiness ERP helps leading food and beverage companies streamline operational efficiency and manage business growth, visit our resources page or reach out to us.

#### **REACH OUT TO US**



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#### About FoodBusiness ERP by NexTec Group

NexTec Group is one of North America's largest and most experienced technology consulting firms, specializing in industry-specific solutions for mid-sized organizations. For nearly 30 years, NexTec has been a trusted partner to businesses, delivering, implementing, and supporting the core Enterprise Resource Planning (ERP) and Business Intelligence (BI) solutions they need to scale and grow. With seasoned consultants from coast to coast, and a premium portfolio of innovative business management solutions including Sage X3, we help you get the most out of your technology investments. Visit www.nextecgroup.com or follow us on LinkedIn.

