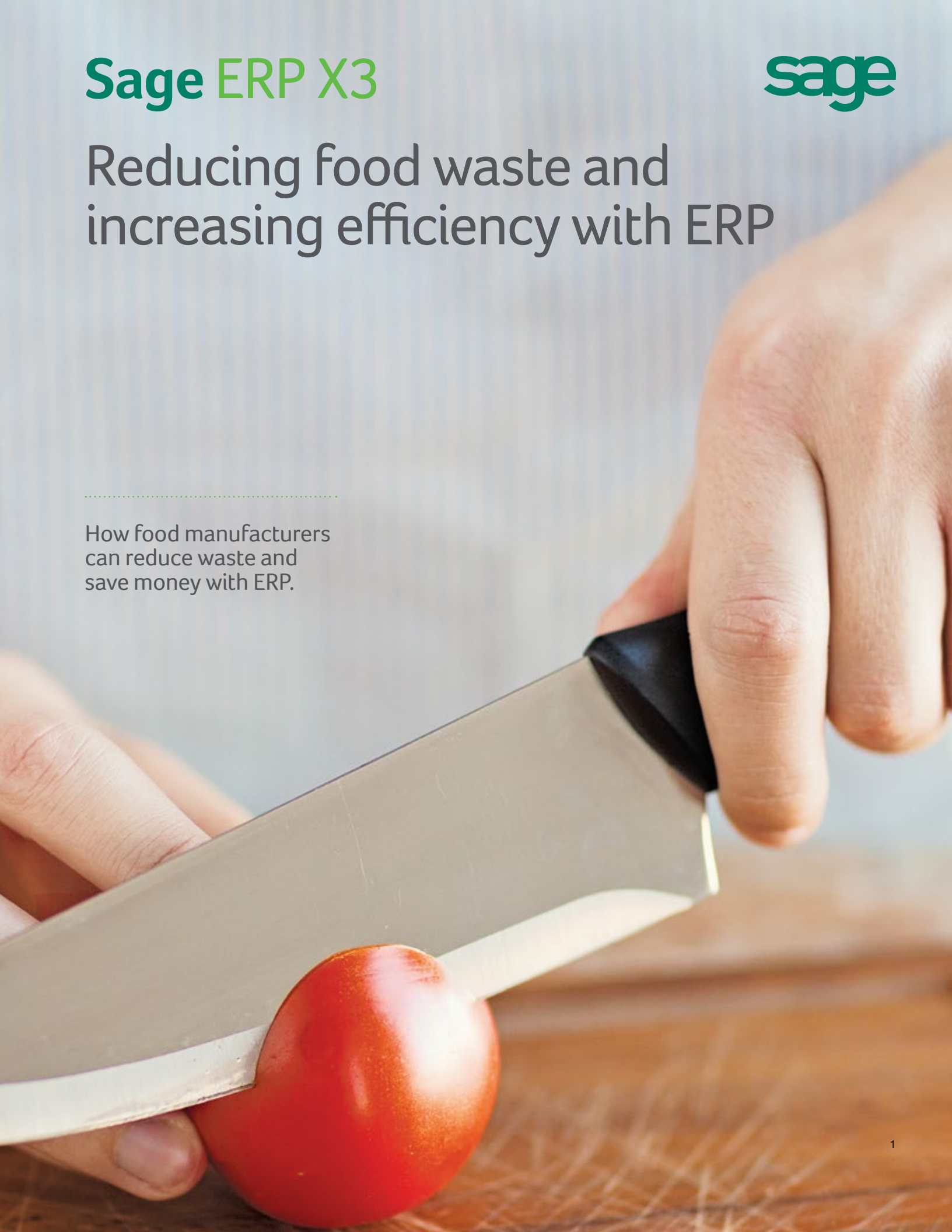
Sage ERP X3

Reducing food waste and increasing efficiency with ERP

How food manufacturers can reduce waste and save money with ERP.



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Introduction

A recent report by Innova Market Insights identified the reduction of food waste as the top food industry trend of 2014, and the food industry's concern with food waste should continue for many years. As reported by *FoodManufacture.co.uk*, "**Food loss during production and food waste, at the retailer and consumer end of the food-supply chain, will be heavily scrutinized**."

Efforts to reduce food waste are motivated in part by sustainability concerns, as some experts estimate that the global food system loses as much as a third of all food grown. As consumers look to food companies for increased sustainability plans, reducing food waste will become crucial to preserving corporate sustainability. Consumers and the industry alike have made it a priority to reduce food waste enormously over the next decade.

Annual food waste disposed by the American food industry

Segment	Waste volume	Disposal costs
Manufacturing	2.4 billion pounds	$59 million
Retail and wholesale	1.7 billion pounds	$42 billion
Source: Food Waste Alliance		

However, for food manufacturers there is an additional motivation: **Wasted food means inefficiency, higher overhead, and reduced profits.** The more food companies can reduce waste within their organizations, the more efficient—and, thus, profitable—they will be. Improved efficiency is best enabled by enterprise resource planning with Sage ERP X3, a fast, flexible solution that helps companies maximize inventory efficiency and reduce spoilage and expiration.

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Benefits of reducing waste

Many food companies accept a certain amount of waste as part of the cost of doing business. However, **regulators and consumers are likely to make waste an urgent issue rather than a given in coming years**, exerting pressure on manufacturers to help reduce waste in order to make the food supply chain more sustainable. Furthermore, reducing food waste can have a larger-than-expected effect on a company's bottom line.

Waste can easily become invisible to decision makers because it is normalized as overhead. However, **once food waste is recognized and reduced, it can bring surprisingly large improvements in profit**—either through reducing purchasing costs or allowing a company to produce more finished product. According to one report, food companies could increase their profits by as much as 10 percent simply by reducing food waste.

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Causes of food waste

It's easy to tell companies that 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. The following section highlights the most common reasons food waste occurs so that food manufacturers can begin to address them.

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Expiration and spoilage of ingredients

The most obvious cause of food waste is when products either pass their mandated expiration dates or otherwise spoil. Although companies understandably 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 decay. Sage ERP X3 helps companies track lots and shelf life so that products can be pushed out before they expire.

Merely trying to speed up the manufacturing process, though, is treating the symptoms rather than the problem. Most companies can manufacture goods more than quickly enough to prevent spoilage; the real issue occurs when manufacturers are unable to move their products down the supply chain at an appropriate rate.

Overstocking

Expiration and spoilage problems, then, often flow from problems in distribution and stocking. Because supply and demand can fluctuate violently in the food industry, it can be a challenge to ensure that stock levels remain appropriate. Overstocking results in waste when companies are unable to sell their finished products. This is a more daunting challenge than the problem of ingredient spoilage because it is not easily solved by increasing manufacturing speed or storage technology. Instead, **reducing overstocking requires the ability to anticipate and project consumer demand accurately—no easy task for any company**. Sage ERP X3 provides robust business intelligence to help companies avoid overstocking. This solution gives insight into historic fluctuations in supply and demand to better enable accurate forecasting.

Cross-contamination

Another common cause of food waste lies in cross-contamination. The incidence of cross-contamination has increased 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 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 in Sage ERP X3 make it easier for companies to manage their warehouses and processes so that cross-contamination will not occur. Its allergen tracking system makes it possible to easily segregate ingredients in the warehouse and move them out before they spoil.

Causes of food waste

Production loss

Of course, some food waste will always occur, and perhaps the most inevitable cause lies in the typical waste associated with processing. Although some industries, such as beverage, may have negligible processing waste, for others the amount of food left on equipment or lost in other forms of processing can add up significantly. The primary solution for this form of waste lies in continuous innovation to processing equipment and material handling. As with other elements of food waste, however, **awareness of where food waste occurs is critical to knowing where to focus innovation, and many companies lack this awareness.** With the detailed and easily accessed tracking information that Sage ERP X3 provides, gaining insight into where food loss occurs is much more practicable.

Lack of traceability

The core of food waste problems, whether spoilage or cross-contamination, is often a lack of effective tracking. Expiration and spoilage occur because a company has slow or ineffective expiration tracking. Overstocking can be traced to an inability to track sales from year to year in order to produce an accurate seasonal forecast. Cross-contamination has many causes, but a major one can be a lack of effective traceability within a company's own warehouses. Lastly, although traceability does not mitigate production loss, without it, companies will never know which processes are causing the most waste. In short, **traceability both along the supply chain and within food companies themselves represents the most important tool available to reduce food waste and inefficiency**. Sage ERP X3 offers robust traceability tools in an easy-to-use and accessible interface.

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Improvement through ERP

Sage ERP X3 is a powerful traceability solution for small and midsized food manufacturers, offering powerful and easy-to-use expiration tracking, lot management, and process information. **With the leading automation and resource management solution of Sage ERP X3, you get powerful data and convenient insight into all your operations**. The solution's mobile options and easy-to-use interface make tracking information available at the touch of a finger to everyone who needs it, including lot tracking information accessible within four minutes.

For additional information about traceability, new regulations in the food industry, or resolving resource management challenges, **visit our Sage ERP X3 Food Industry Resource Center at http://www.sageerpx3.us/foodandbeverage, or call us at 1-866-530-7243.**

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