

Is Zero Waste Possible?

Matthew Hollis

A look at whether technology can help restaurants eliminate waste entirely

Commercial kitchens are some of the fastest-paced, most challenging environments I've ever worked in. Something about the dinner rush is just invigorating, with orders piling in and team members running around to achieve culinary perfection. However, this is also the time when perfectly planned processes on paper simply fly out the window.

We in the restaurant business all know that managing our prime costs is key to running a profitable restaurant operation. This means our two most valuable items in the supply chain are raw ingredients and our employees. Working to reduce waste throughout the kitchen to help us control both of these cost items is an uphill battle. Luckily, there have been significant technological advancements that can help restaurant facilities work to our common goal: to waste nothing.

Reducing Waste at its Source

Digital waste scales are seemingly a simple concept. Everyone always quotes the adage, "You can't manage what you can't measure." It's absolutely true. Another hot buzzword is this concept of the Internet of Things (IoT). Pair these two together, and the result is a digital waste scale allowing you to weigh, categorize and even photograph what you're throwing away.

A range of companies offer these devices, with numerous levels of support and reporting to help you identify what you're throwing away—and why. The key here is source reduction of waste, which results in more efficient inventory ordering, better demand estimating and, ultimately, a reduction in your overall food cost. That reduction in food cost can be as high as 1 to 2 percent, which can result in around a 50-percent reduction in food waste.

Redirecting Uneaten Food

With millions of people classified in the United States as food insecure, it is as important as ever to stop wasting food. Of course, this goal also delivers significant bottom-line impacts. However, despite our best efforts for source reduction, we still end up with food that is unable to be served to guests for a multitude of reasons.

In some cases, this food is still edible and nourishing, and donating it to charitable organizations can be a great solution to help America's food insecure. This solution also offers tax benefits and reduced waste disposal costs as a result of the diverted material. However, charitable organizations are often run with limited budgets and staffed by volunteers, which means they aren't always on time or consistent in their operations. Add to that the large geographical footprint, multitude of legislative operating conditions and potential for lawsuits, and it makes food donation very unattractive.

Luckily, a number of web-based platforms can assist with setting up relationships, tracking donated food and ensuring you receive an ROI from this exercise. The payback comes in the form of reduced disposal costs (sometimes upwards of 5 percent), as well as tax benefits that vary by restaurant and state.

Understanding Your True Waste Volume

At some point, even the most efficient kitchens will generate waste. There are only so many menu items, such as soup, that you can create from re-purposed food scraps—not to mention the volume of packaging that is involved in running the back of house.

That's why it becomes important to source separate your waste into organics, recyclables and trash. After source separating, you should set up disposal services that best fit your facility and operational goals. Typically, this will result in some type of compactor, dumpster or total collection services. As facilities folks, we all hate the late-night phone calls of dumpsters overflowing on a Friday night. This is why a number of restaurant facility professionals prefer to have their disposal services slightly inflated to help accommodate for these unpredictable fluctuations in waste generation. This can add up to serious dollars, as you're paying for services that you aren't using.

Perhaps it's no wonder then that IoT technology is used for dumpster monitoring. There are a number of devices that can tell you exactly how full your bins are and when they were last serviced and even send periodic photographs to help you catalog the waste in each receptacle. While these systems can reduce your overall disposal costs, they're also extremely beneficial in understanding exactly how much waste you're generating. Depending on how well your program is managed today, you could see savings in your waste general ledger of 15 to 20 percent.

Turning Waste Data to Business Intelligence

These are just a few of the technologies that are being advanced to help restaurants waste nothing. While they are exciting, you still need to marry all of this data into something meaningful for your business operations that you can benchmark and measure against.

New web-based platforms can take all of this data from scales, food donations and disposal programs and compare it with your point-of-sale data to yield some strong business intelligence metrics for your operation. These metrics can be customized to help your operations understand the performance of all of your restaurants. Once established, you can set up benchmarks for these metrics and send periodic automated reports throughout your organization. With these technologies and processes in place, you can then begin managing what you're measuring on the road to waste nothing.

Matthew S. Hollis is the President of Elytus, a waste-management company committed to helping their clients waste nothing.