



Fresh Item Management (FIM) Technology Reduces Waste, Improves Margins For Global Retailers

Fresh and prepared food items are the most profitable for a supermarket or grocery store, but they also tend to have the highest waste.

Fortunately, technology and advanced tools are helping food retail managers address the latter part of that statement. The old approach of anecdotal "guesstimation" and intuition are being replaced by actionable data and analysis, meaning stores can pocket a greater share from the most lucrative parts of their perimeter.



Waste at the Retail Level

The value of global food waste is estimated at \$1 trillion per year. While 40 percent¹ of that is lost in the supply chain, the retail sector generates a hefty share. In the United States, consumer-facing businesses account for more than a third of food waste, the largest portion² of which is in grocery stores and distribution centers.

Current shopping trends, fueled largely by millennials, have made the perimeter more important than ever to retail food shops. Consumers are looking for high-quality products that fit into busy lifestyles. It's why supermarkets have spent billions revamping their perimeters, which these days commonly include fresh foods, organic produce, artisanal goods, specialty cheeses, and sometimes even craft beer stations.

Research³ from IRI found that perimeter departments accounted for up to 40 percent of store footprints these days, while sales growth in store perimeters increased 2.7 times more than the store sales as a whole over the previous four years. A joint study by Nielsen and the Food Marketing Institute (FMI) in 2016 determined that deli and prepared foods was the fastest-growing retail category.

Given that most of the loss in retail food operations comes from perishables, added emphasis on fresh and prepared items suggests increased waste. This is compounded when you factor in that much of the waste isn't from spoiled food, but rather a lack of real-time responsiveness to manage unsold inventory.

So-called zero-waste markets have found limited success in Europe, but a sustainable design concept has been more difficult to achieve in the U.S. Still, the expectations for store managers to maximize profit in an industry already working on slim margins, coupled with demands from consumers to provide more while wasting less, are forcing food retailers to seek and employ the latest techniques and technologies to accomplish these goals.

- $1.\ https://www.businessinsider.com/why-grocery-stores-throw-out-so-much-food-2014-10$
- $2.\ https://www.feedingamerica.org/our-work/our-approach/reduce-food-waste$
- $3.\ https://www.grocerydive.com/news/grocery--prepared-foods-are-hot-but-inefficiency-could-cool-the-trend/534082/2009.$

Where Inefficiency Thrives

Food retailers know the upside to fresh and prepared foods, which is why they continue to increase in the store footprint. However, fresh items have considerations beyond most centerstore inventories due to accelerated expiration dates, uniqueness of the inventory, and lack of bar coding. There is a struggle to quantify on-hand fresh items quickly and easily without an appropriate software management solution, yet the ability to quickly and accurately checkpoint how much inventory is on hand is crucial for perpetual inventory, shrink reduction, production planning, and replenishment ordering.

In addition, many typical business practices in perimeter sections are highly wasteful. Common practices where waste and shrink can happen include:

Overproduction:

Producing too much of an item can lead to heavy losses, both in waste and revenue. Overproduction can stem from poor estimates on how much of a certain item to produce, or from an inclination to keep displays stocked even at times customers are unlikely to purchase. Research has shown that consumers are less likely to buy from displays that are not well stocked, but keeping fully stocked displays encourages waste.

Underproduction:

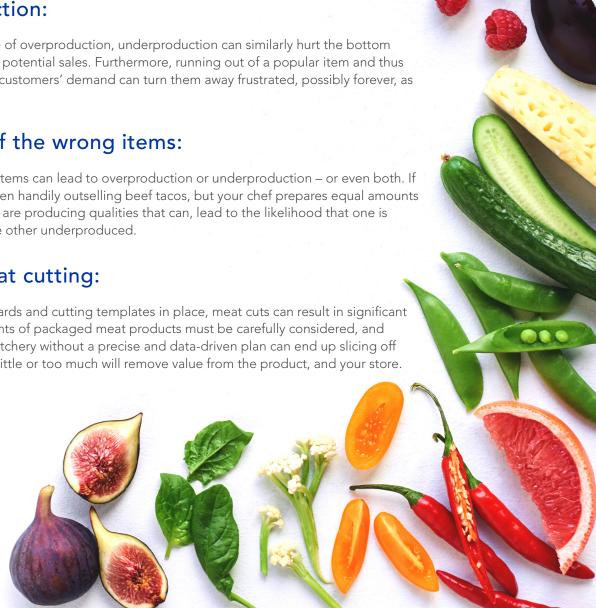
Obviously the flip side of overproduction, underproduction can similarly hurt the bottom line by missing out on potential sales. Furthermore, running out of a popular item and thus being unable to fulfill customers' demand can turn them away frustrated, possibly forever, as customers.

Production of the wrong items:

Producing the wrong items can lead to overproduction or underproduction – or even both. If chicken tacos have been handily outselling beef tacos, but your chef prepares equal amounts chicken and beef, you are producing qualities that can, lead to the likelihood that one is overproduced and the other underproduced.

Incorrect meat cutting:

Without proper standards and cutting templates in place, meat cuts can result in significant waste. Sizes and weights of packaged meat products must be carefully considered, and failing to approach butchery without a precise and data-driven plan can end up slicing off profits. Trimming too little or too much will remove value from the product, and your store.



Producing food at incorrect times:

Failing to understand precisely when to prepare items can generate substantial waste – for example, preparing rotisserie chickens too early. If the chickens have a shelf life of only four hours and many are prepared at 7 a.m., then the chickens unsold before noon (likely a lot of them) must either be tossed out or repurposed. Knowing peak selling points for items can help ensure you prepare those items at the right times, not only preventing waste but also providing customers the freshest products.

Similarly, the order of which items are prepared can impact your waste production. A kitchen can only prepare so many items at one time. It's important to understand which items to prepare in a staged plan, thus avoiding situations where some items go bad too early or you run out of an item before the restock is prepared.

Missing the markdowns:

Marking down unsold items at the end of the day can help move product that might otherwise have been leftover. The key is knowing when to markdown and making sure customers can find the items.

Consumers love a bargain, and locating discounted items will sometimes encourage them to buy products they hadn't originally intended. However, those consumers can also get confused by expiry dates. Some grocers will misguidedly remove products from shelves too quickly, fearing customers might be put off by use-by or sell-by dates. But having a data-backed plan for knowing when and how to discount items can help retailers make the most of markdowns.

Inefficient store operations:

A lack of detailed training and poor department oversight can fuel significant inefficiencies in retail perimeters, and inefficiencies in the perimeter can be costly in terms of both revenue and waste.

Employee turnover is a reality in grocery retail, which can make it challenging to maintain consistency in operations. Recipes, techniques, procedures – these can all be difficult to sustain in an environment of rapidly changing personnel. As a result, fresh item management (FIM) solutions are needed to help offset this loss of expertise each time a staff member leaves or a new staff member is onboarded.





What Exactly Is FIM?

Fresh item management (FIM) describes the tasks involved in managing fresh food items in a grocery or convenience store environment. FIM helps manage the stages of fresh food throughout its lifecycle - from ingredient ordering to production to the point of sale. But it's more than that. FIM at its best uses insightful business analytics and reporting to enable store associates to consistently measure the effectiveness of their fresh operations.

A full FIM solution combines several components, including scales management, recipe management, meat management, and production planning. It helps to understand how each of these impacts fresh item management.

Scales management:

A scales management system enables retailers to improve scale pricing as well as manage ingredients, nutritional information and labeling. This centralized visibility allows for improved performance and decreased maintenance costs. It also results in a reduction of waste simply by showing retailers what errors have been made and the critical events that contributed to them.



Recipe management:

Standardizing and centrally managing recipes helps in a number of ways. Foremost, you're ensuring that accurate information maintains compliance with government regulations, including the FDA's Menu Labeling Law that went into effect in May 2018, and well as the NLEA (Nutrition Labeling and Education Act of 1990) and the Nutrition Facts Panel update that comes into force in January 2020.

Additionally, a recipe management plan provides automated, perpetual inventory management of both ingredients and saleable items. It can determine precise costs and margins of in-store produced items and generate suggested retail pricing based on FDA-compliant ingredient and nutrifact data. Ideally, the recipe management plan links to the scales management software, so it can automatically update scales and printers that are connected to the companywide scales management system.

Ultimately, you control your recipes and production processes in one central location, eliminating in-store labor duplication.

Meat management:

A meat management system allows you to centrally define and standardize templates and text required for meat cutting while also retaining fresh meat traceability through electronic grind logs. It standardizes and verifies the ways in which meat primals are cut across your cutting plants and grocery retail chain, saving you time and money.

Furthermore, from a safety perspective, this enables rigorous-yet-easy compliance with regulatory directives for tracking the various contents of your meat grind/mince batches. It also facilitates your link in the "farm-to-fork" traceability chain now required or expected in many regions.

Production planning:

Recipe and scales inventory management become the proper foundation for production planning in fresh departments. Retailers who have visibility into their ingredients and understand the pricing on these variable items can gain accurate forecasting into supply and demand.

Production planning solutions can manage and track the production and ordering of all fresh food service areas, including meat, seafood, bakery, prepared foods, deli and produce, as well as generate demand-driven production plans for fresh food departments, based on store-specific local events, weather, promotion among other factors histories.

As mentioned, a successful production planning model begins with an audit that provides retailers with a detailed review of how well your grocery retail store or chain is operating compared to the industry standard. It will also give the retailer knowledge on how much waste they can be expected to reduce and projected sales increases. Retailers are often surprised at how quickly FIM implementation can impact efficiency and the bottom line.

About ADC

To us, it's all about keeping things fresh. We are fresh food technology innovators and our industry leading software, FreshIQ, helps our customers tell their fresh story. At ADC, we believe the days of instinctive merchandising are numbered. More than ever, retail merchandisers need data driven methods to forecast the right amount of product availability, all while maintaining product safety and keeping fresh food profitable. We simply seek to give people what they want—easily available, convenient and safe, fresh food.

ADC is deployed in more than 13,000 locations and 130 retail chains around the world. If you'd like to learn more about how these tech-driven solutions can make fresh possible for you, contact ADC today at 1-800-849-1818 or Info@AppliedDataCorp.com.



