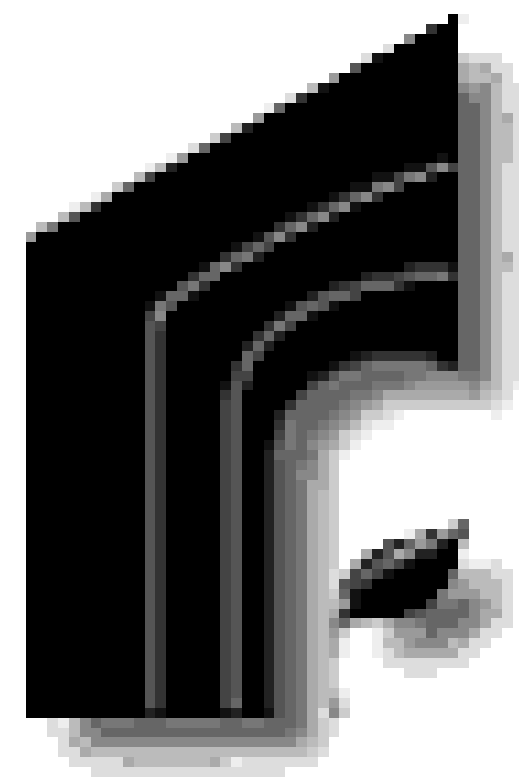
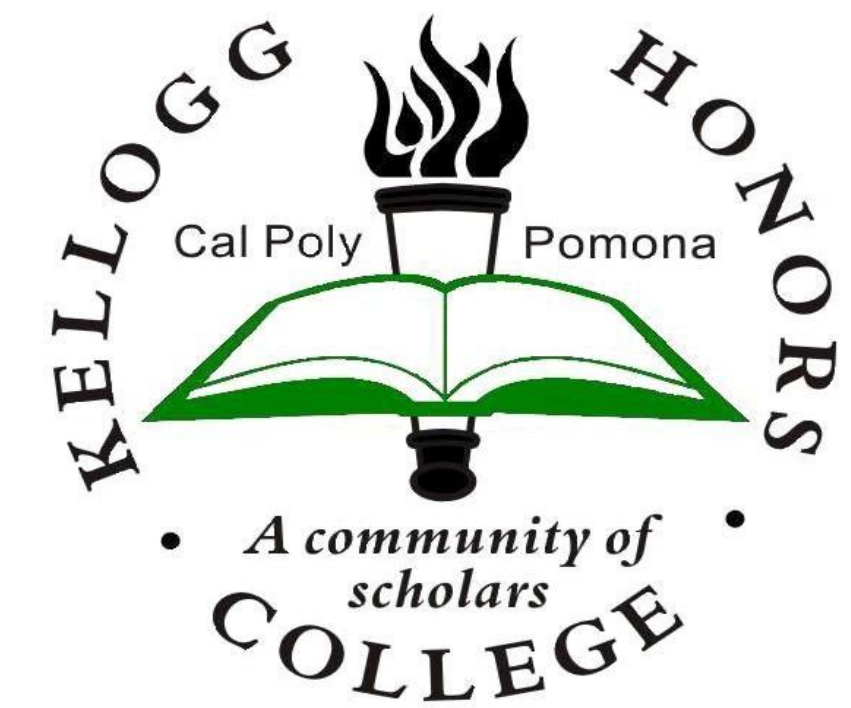


A Comparison of Food Waste Management in the Hospitality Industry



Margaret Rewers, Hospitality Management
Mentor: Dr. Don St. Hilaire
Kellogg Honors College Capstone Project



Abstract

Restaurant industry sales are projected to reach \$798.7 billion in 2017, a 4.3 percent gain over the industry's estimated sales of \$766 billion in 2016. Food waste is now a top concern for not only hospitality operators, but also consumers. The hospitality industry continues to adapt to meet the evolving demands of consumer groups: millennials, generation X, and baby boomers. The dangers of the growing size of its environmental footprint has come under increased scrutiny.

Thus, the importance of controlling food waste in the production and service process is vital. In this study, I reviewed literature examining waste management in the hospitality industry and the different practices that can be used to reduce food waste. I examined foodservice companies in different sectors of the hospitality industry and reviewed their current waste management programs. A list of key questions was developed. The food waste programs and practices used by these companies were compared and contrasted. The effectiveness of the current programs, the impact on the organizations and recommendations are presented. The awareness, implementation, and evaluation of food waste management will continue to grow in the hospitality industry.

Industry Standards

Step 1: Source Reduction

Conduct a food waste audit: one example-LeanPath software: <http://www.leanpath.com/>

Front-of-House Focus: consider monitoring portions, offering appropriately-sized "to-go" containers, providing half-portions, transitioning from self-service buffets to "served" food stations
Back-of-House Focus: consider inventorying food and tracking waste, adjusting food ordering, using the whole protein, continually training staff

Step 2: Food Donation for People

It is recorded that one in six Americans receive food assistance, so it is extremely wise for hospitality establishments to start making the choice of putting their leftover food to good use. The National Restaurant Association partnered with Food Donation Connection to offer services to help restaurants connect with charitable organizations.

Step 3: Feed Animals

Farmers have accepted leftover raw foods for generations and they'll often pick up food at a reduced cost (compared to landfill hauling) or even for free.

Step 4: Industrial Uses

Converting fats, oils, and greases (FOG) to Biofuel: According to NRA research, 74% of restaurateurs surveyed recycle their FOG. If not properly disposed of, FOG can clog your sewer pipes and you could be fined for proper cleanup. Anaerobic Digestion (AD): AD takes organic material and ferments it in the absence of oxygen. This creates methane (natural gas) that can be burned for industrial uses or to make electricity.

Step 5: Compost

Non-edible food scraps-plate scrapings, fruit and vegetable peelings, spoiled foods, etc. can be collected and converted into compost that can be used to fertilize crops, lawns, and gardens. Composting can lower hauling costs, remove tons of waste from water treatment plants, and divert reusable, organic matter from landfills



The Companies



BON APPÉTIT
MANAGEMENT COMPANY
food service for a sustainable future®

TENDER GREENS

The Six Questions

1. What has been the most challenging part of implementing these programs and how did you overcome this obstacle?
2. Are there any deviations in your programs based on the different locations?
3. How do you evaluate the successfulness of your company's food waste programs?
4. Are there plans to implement additional food waste programs? If so, what are they?
5. Are the current food waste programs sustainable through economic downturns?
6. What advice do you have for other companies who want to develop and implement food waste programs?

Findings

The biggest challenge for Bon Appetit is that there isn't a one-size-fits-all approach to waste prevention and management. Each café has a unique set of challenges and opportunities depending on where it is in the country, the service model, the size of the operation, and the clientele they're serving. Another challenge is crafting a companywide waste sustainability policy that sets a high bar for chefs and managers, while still being attainable for everyone. There was an initial challenge for Starbucks to improve their recycling programs since customer's ability to recycle their cups, whether at home, work, in public spaces, or in their stores, depends on many factors such as local government policies and access to recycling markets, such as paper mills and plastic processors. For Tender Greens, because their profit margin is very small, they have to bring as many people in the door and serve them as fast as possible, making any new procedure difficult to start and maintain.

Bon Appetit holds all accounts to the same standards of holistically preventing and reducing waste, but gives them flexibility in how they choose to do that. Each of their accounts is expected to be preventing waste in one of the five ways: regularly purchase Imperfectly Delicious Produce, host an annual waste awareness campaign, LeanPath, an eco clamshell/reusable container program, or going trayless. With operations in 70 countries, Starbucks has to take into consideration recycling infrastructure and market conditions. This proposes a challenge to require recycling programs at each store, thus making each recycling program be customized to each store and market. For Tender Greens, since they are a very democratic company, they empower their chefs to run their restaurants as if they each owned their own store. Some chefs have close partnerships with specific local farmers where they will pick up produce scraps they have collected to feed their chickens or other livestock.

Bon Appetit and Starbucks both look at a wide variety of measures including but not limited to: waste reduction numbers, pounds of food rescued, and resources saved. They focus on participation in various programs and look at the impact they are having on the community. Tender Greens doesn't look at specific measures or data, but rather try to do things the 'right way' to the best of their ability. Minimizing food waste is something that is intrinsic to being a chef, as they appreciate the entire ingredient and know how to use the whole protein or vegetable so that nothing goes to waste.

Bon Appetit has pledged to reduce food loss and waste by 50% by 2020. In March of 2016, Starbucks launched FoodShare, a program to donate ready-to-eat meals to food banks from its 7,600 company-operate stores in the U.S. It's goal is to rescue 100 percent of food available to donate from their company-operated stores. By the end of September, Starbucks plans to be in 18 markets and at a full scale in 2019. Starbucks estimates that partners in company-operated stores will be able to provide 50 million nourishing ready-to-eat meals each year. Tender Greens states that by the end of 2017, all of their restaurants will have a separate collection for organic waste. They are currently working with waste haulers to start 'dumpster audits' separating and weighing the various categories of waste to really identify opportunities.

For Bon Appetit and Starbucks many waste prevention programs are good for the environment and good for business, even they take effort. For Tender Greens, since they only do things that improve their business model, they actually end up helping them during tough economic times.

Bon Appetit and Starbucks advises using resources such as the EPA and organizations like the NRDC, and The Zero Waste Business Council, which have developed toolkits, guides, webinars, and marketing campaigns to make this easy for businesses. Tender Greens advises to start by finding the potential financial savings. Tender Greens philosophy is, 'getting back to past human history mindset on sustainability is key- the less you waste, the more you have, and the less you will have to go out and hunt and gather for tomorrow.'

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Conclusion

In this study I reviewed the literature available on food waste management in the hospitality industry. This paper focused on the characterization and different practices available for food waste management in the hospitality industry. From my research, it is clear that food waste is the most significant component of waste in the hospitality industry, with 40% of the waste from hotels and 60% of the waste from restaurants. After examining certain companies in the hospitality industry and their current food waste management practices, I developed a list of key questions to be answered by representatives in the companies. The companies I chose to interview were Starbucks, Bon Appetit Management Company, and Tender Greens. After reviewing their answers to my list of key questions, I then compared and contrasted the effectiveness of their current programs, and the impact it has had on their business.

I have shown how food waste management in the hospitality industry has improved significantly in the past 15 years, and continues to expand with more knowledge and awareness. Ultimately, it is up to the company itself to address this matter, but with the right team of driven individuals and the right resources available, sustainable food waste management can be achieved. From the results of my questionnaire, I have shown that it is possible for companies to be successful in food waste management, and can serve as an example for existing and future companies who want to start improving their food waste management.