



**Food Wastage: An epidemic heading towards its own demise?**

Picture source: <http://cdn.modernfarmer.com/wp-content/uploads/2013/09/food-waste-feature-2.jpg>

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## **Foreward**

This article is jointly written by EnviroChill (EC) of Australia, Wolfe Strategies (WS) of Australia & Singapore and Evalua8 Corp (EV8) of U.K.

## **Disclaimer**

This article is not intended to replace professional advice. The conditions under which businesses operate are dependent on many factors – any business advice should take into consideration all major aspects under which a particular organization operates in.

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## The issue at hand.....

Just google “Food Wastage” and you get 1.63million results in under 45 seconds! Trust us, we know, because this is exactly what the authors did!! Wikipedia has a lengthy description on Food Wastage broken down geographically and highlighting the main countries contributing to this unjust cause



To drill down to a few countries and put into numbers, Australian households wasted \$8billion in 2013<sup>1</sup>, the UK accounted for GBP10.2 billion and Singapore wasted \$1.4billion in 2014. Presently, around the world, there are multiple international and local community efforts to combat this epidemic with solutions ranging from landfills, greenhouse gases to composting

(Picture source:

<http://www.foodwise.com.au/foodwaste/food-waste-fast-facts/>)

***So, why are we writing this article? Who is this for? How will it be of any value add?***

The authors (*brief bios and contact details available at the end of this article*) have a collective expertise of over 20 years working in the Food & Beverage industry and share their thoughts here as a way to help restaurants/bars/café owners in Australia, Singapore and the U.K. work towards creating a significant impact in the global fight against food wastage.

Below we examine each region’s food waste contributions and share some helpful tips on combating these

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<sup>1</sup> Source: <http://www.environment.gov.au/protection/national-waste-policy/food-waste> )

## Australia

In most, if not all manufacturing industries, waste is a key issue which features highly on KPIs and efficiency targets. Whether it is components that are 'dead on arrival', or fail when installed, to excessive trim on raw materials and finished goods, you can find waste tracking systems galore.

Sadly though, for the hospitality businesses, which are really just micro manufacturers, this is an area that is often overlooked. Interim results from the RMIT University research project [Watch My Waste](#) uncovered that **only 22% of foodservice businesses had ever done a food waste audit or assessment.** Even more worrying is that ***most foodservice businesses do not think they even produce food waste.***

When you start to look at the numbers, it becomes pretty clear how this can impact your bottom line. Using the interim data from RMIT, for every \$10,000 in turnover, \$2,400 is spent on food purchases. *With an average of 40% of those food purchases ending up in the bin,* this equates to \$960 in cost alone, without even taking into consideration the markup on lost profit.



(Picture source: <http://reneweconomy.com.au/wp-content/uploads/2014/03/food-waste.gif>)

The best way to start reducing waste in your food business is to start to measure and analyse it. It doesn't have to be difficult, but it does need enough detail to be worthwhile. You may simply start with

- spoilage,
- preparation; and
- customer plate waste.

Set aside designated containers to weigh the waste at each stage and keep records for a month. During this time you may start to notice specific items which make up the majority of each bin. “*Are there tomatoes wasting in your fridge before they are used?*” This could be a problem with your supplier, or an inefficiency in your menu. “*Is your prep cook a little too generous with peeling and trimming (could these be put to better use in stocks and soups?)*” And finally, “*how much are your customers leaving on their plate?*” **Carbohydrates** are the most wasted food group, followed by garnishes and obligatory side-salads.

Some ideas to reduce food waste include:

- Change your menu regularly using seasonal ingredients with longer shelf life.
- Invest in quality equipment for the preparation of food – sharp knives mean less waste.
- Store fresh produce at the correct temperature and humidity where possible.
- Create a clear stock rotation system to ensure 'first in first out'
- Ensure that your refrigerator and freezer are maintaining proper temperatures
- Invest in quality cleaning products and maintenance of your refrigeration for a hygienic food storage environment.
- Assess portion sizes and offer side dish options to reduce consumer waste.

A recent report from Champions 12.3 found that for every \$1 invested in reducing food waste, businesses received a \$14 return. Adding that to our example above, that \$960 could become over **\$13,000 in savings**.

## Singapore

According to Singapore's National Environment Agency (NEA), "Food waste accounts for about 10 per cent of the total waste generated in Singapore, but only 13 per cent of THAT food waste is recycled. The rest of the food waste is disposed of at the waste-to-energy (WTE) plants for incineration. The amount of food waste generated in Singapore has increased by almost 50 per cent in the past 10 years<sup>2</sup>"

And when you zero in on the F&B industry within Singapore, this issue becomes even more acute. A 2009-2010 study<sup>3</sup> by 3 journalism students of Nanyang Technological University in Singapore showed that the common causes of food wastage within the Singapore F&B industry were<sup>4</sup>:



(Source: <http://4.bp.blogspot.com/-jPZSHl7kfpG/Ua44lMOCLeI/AAAAAAAAIzA/oXlF2kxGbXw/s1600/Untitled-12.jpg>)

Cosmetic Filtering i.e. food that looks "ugly", damaged or less than perfect according to market or personal standards are discarded;

- Lack of proper training & management of "back-of-house" staff including chefs;
- Improper raw materials procurement and inventory management systems

In recent years, government and private institutions in Singapore have actively launched initiatives to tackle this epidemic. Solutions ranging from Food Waste Minimisation Guidebook for Retail Food Establishments<sup>5</sup> to aerobic digesters which are equipment that use micro-organisms to "eat" and "digest" food waste<sup>6</sup> are being trialled and tested across the country

In addition to these efforts, *what steps should F&B businesses within Singapore take to minimize food wastage from the very beginning of their operations?*

1. To begin with, restaurants/ cafes / bars owners should invest a good portion of their time building a budget for their company as well as forecasts growth. This will help them develop a reasonable estimate of their business' costs and would assist them in implementing cost control measures. When applied specifically

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<sup>2</sup> Source: <http://www.nea.gov.sg/energy-waste/3rs/food-waste-management>

<sup>3</sup> Source: <http://ww5.foodwasterepublic.com>

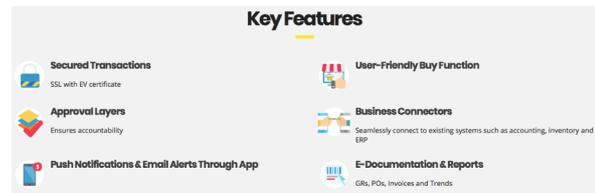
<sup>4</sup> Source: <http://www.savefoodcutwaste.com/food-waste/food-wastage-in-singapore/>

<sup>5</sup> Source: <http://www.nea.gov.sg/corporate-functions/newsroom/news-releases/food-waste-minimisation-guidebook-for-retail-food-establishments-launched-at-3r-awards-for-hotels-2016>

<sup>6</sup> Source: <http://www.eco-business.com/opinion/is-singapore-ready-to-tackle-food-waste/>

to food wastage, forecasts and budgets would help ensure that raw & perishable food products are ordered in advance only when there is concrete need for those.

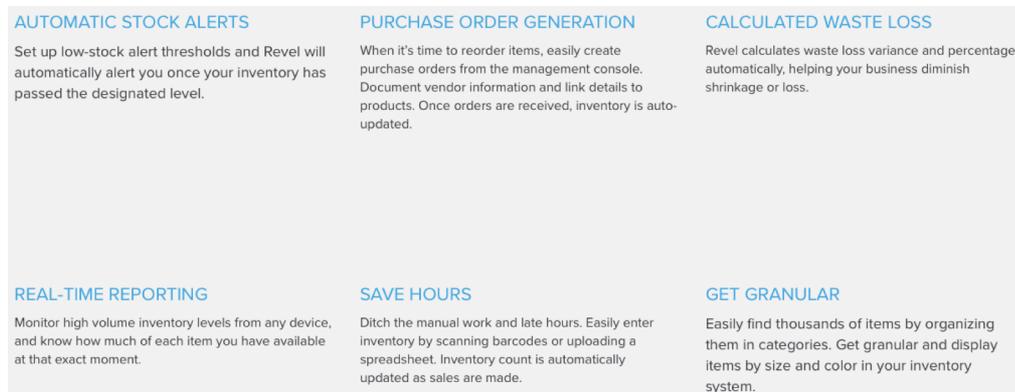
2. Implementing and using a good e-procurement cloud software can simplify back office operations thereby adding value on time and cost saved for an F&B business.



(Source: <http://www.sgebiz.com/services/ezyprocure-e-procurement-system/>)

For example, in Singapore, a popular e-procurement platform called EZYProcure has been revolutionizing the way F&Bs order items from their suppliers by providing an easy-to-use cloud based platform for businesses to order goods and cutting down on paper-based transactions. The platform provides real-time reports and analysis of an establishment's ordering practices thereby providing F&B owners with vital data to build policies on costs and food waste reduction.

3. F&B owners are also advised to invest in a good Point-Of-Sale (POS) software. A POS software these days not only assist with real-time sales but will help with managing an outlet's inventory.



(Source: <http://revelsystems.com/sg/features/inventory-control/>)

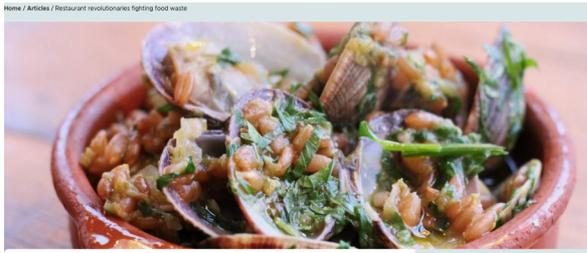
For example, Revel (a well-known POS software) manages your inventory on a very granular level providing you with detailed insights on your stock levels.

*Quick Tip: Connect your POS to an e-procurement system such as EZYProcure, and you have the 2 major operations of your business – Sales & Purchases - on the cloud and on your smartphone!*

To conclude, planning your operations in advance and reviewing them monthly as well as using the latest technology will provide you with time and financial savings and combat food waste levels at your F&B-outlet.

## U.K

According to research by the charity WRAP (Waste and Resources Action Program), the amount of food that is wasted annually in UK pubs and restaurants is equivalent to throwing away one in every six of the eight billion meals served each year.



(Source:  
<http://sustainablefoodtrust.org/articles/restaurant-revolutionaries-fighting-food-waste/>)

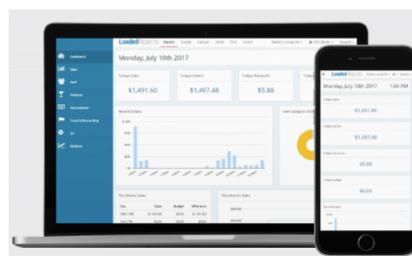
As reported by Kathleen Steeden in her write up [“Restaurant revolutionaries fighting food waste”](#). As of August 2016, various restaurants in London have taken up an initiative to reduce wastage and further consider this a key part of their CSR activities. While this is a welcome move from larger F&B outlets, many mid-sized and small restaurants and café owners struggle to put a real value to the amounts of food and other materials wasted.

There is an increased need to capture data that is exclusive to each organization and use this to study and avoid costs associated with loss of edible materials as well as other forms of energy associated with sustaining it. Understanding consumer behavior and appetite (in the literal sense) forms a large portion of what ticks with them.

Some steps to consider,

1. Understand industry best practices followed by larger organizations to tackle the issue of not only wastage of food or raw materials but also space and energy associated with locking up resources on areas and products that are not individually profitable.
2. Use of intelligence tools to gather information that is key to business performance. While there are scores of POS systems that integrate well with cloud-based accounting tools, the availability of business intelligence tools that can drill down and show insights are limited.

For example, within the Xero eco-system, Loaded Reports are one such provider who works mainly in the hospitality sector to change data into meaningful analysis



(Source:  
<https://www.loadedreports.com/Home/Features>)

3. Understand and nurture key drivers of success for the business - Unless there is an understanding of why people love your brand and the meal / drink you serve, it is always a hit and miss when it comes to scaling your business. The more you understand what makes you unique and drives demand, the more you would concentrate on the right aspects, thereby also reducing unnecessary time, money and energy spent on less fruitful endeavours.

For e.g – If you are driving more customer traffic during certain hours of the day, consider setting up a home or office delivery for off-peak times. These insights can be objective only when you measure non- financial data such as occupancy rates or similar.

## **Conclusion**

You can't manage what you don't measure. Start recording your food waste today and share the results with your staff and customers. Food waste is a trending global issue and businesses that focus on reducing their environmental impact are highly regarded by today's consumers.

*How do you find the resource and time to track and minimize your wastage?*

- ✚ Start by automating your outlet's back-end operations. As we have shown on page 8 of this article, new technologies are now available right on your smartphone that'll free your staff from the mundane tasks.
- ✚ Furthermore, as recommended on page 6, setting detailed policies with your kitchen staff will help identify and correct areas of food wastage.
- ✚ And finally, building budgets and forecasts and regularly updating them will provide you with key financial as well as non-financial data of what is working for your business. Once there is an understanding of "what ticks", the more unproductive areas can be avoided.

## About the Authors



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