CAPSTONE PROJECT FINAL PROPOSAL:

I was able to obtain a whole year’s worth of sales data as well as wastage data from my workplace.

The sales data shows:

* item code,
* sales count,
* item cost,
* total sales
* profit

The wastage data shows:

* item code
* case (unit measure e.g. by piece or by kilo)
* case no. (amount)
* cost by case
* total cost of wastage

Now I have these values I need to re-categorise the data if need be according to type (whether it is a beverage or etc. and also sub-categorise if needed). I guess the logical thing to do is to create several tables and or data frames. Since I do have only the sales and wastage data, I think I can merge the two datasets if I’d like to find out what the most profitable items are in store. Some items are not reported in the sales data as they are raw/bulk ingredients that go into salad-making as well as separate co-worker menu, therefore it might be best to create a separate table for that as well. So I guess from what I can glean from the data I will be able to obtain possible insights on:

* Most profitable items (by sales count, profit, (perhaps change this to cost per item)) & checked against amount of wastage to see if there is any correlation: this might prove to be a symptom of operational performance and/or indicate consumer behaviour/preferences(we can probably check this against a demographic dissemination later on)
* We might also be able to derive the proportion of sales in different locations of each food item in the store and there are several distinctive areas: Coffee bar, restaurant display cabinets, restaurant counter, and the bain marie. The implications could be that we could use the information in terms or reorganising the restaurant area layout, or in finding out if it is more profitable to make a certain item available in other areas in the restaurant. This could make it more accessible for customers and can have a positive effect on sales.
* We can also derive from sales, what items in our menu offerings sells the most (we have distinctive categories: beverages, salads, cakes, breakfast, bain marie menu, pastries which can be identified /subcategorised according to food type e.g. beef, poultry, vegetarian, gluten-free, seafood, deep-fried etc.) , is the most profitable and incurs the most wastage. From this we can estimate accurate proportions and adjust our bulk orders accordingly (adjusted by total sales count) as well as possibly come up with ideas for designing upcoming menu ranges(this could help narrow down sourcing). The information can also help standardise operational procedures in a major way. E.g. I can map out items and their cooking/prep times/holding times and figure out a suitable production flow, in order to maintain quality and safety as well as abide by cost-consciousness guidelines. Recorded wastage is mostly from end-of-day left-overs, and rarely from expired goods.