

MAKING SUSTAINABILITY CONVENIENT: Customized Food Ordering To Incentivize Food Waste Reduction At Bistro



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PROBLEM

How might we enhance large-scale sustainability practices at McMaster University?

- McMaster produces 120 tonnes of organic waste every year. Over 40 tonnes go to a landfill. The rest is composted, but most of it could have been eaten. ²
- Much of this is food. The school plans to reduce organic waste by encouraging students to take uneaten food home, and eat it later.³
- However, it is often more convenient for students to throw out uneaten food and simply buy more food when they are hungry. On a large scale, people are likely to choose quick and easy approaches regardless of sustainability.
- At popular locations on campus, meal sizes and composition are very fixed. If a person does not want to eat everything they purchase, waste is likely.

McMaster put

40 metric tonnes

of organic waste in landfills last year.1

77 metric tonnes

were composted.

63% of Canadian food waste could have been eaten.²

SOLUTION

After discussions with sustainability experts in the community, it became clear that **reducing** food waste is much more impactful than diverting it.

Additionally, students have expressed a desire for **simple** sustainability solutions that fit well into their busy schedules.

Our proposal is to modify the food ordering system at Bistro in order to give students more control over what they order. This solution would:

- Leverage the existing kiosks at Bistro to provide a larger variety of portion sizes for existing meals, at a low implementation cost.
- Cancel charges for food excluded from meals (e.g. mushrooms), incentivizing students to **think** about what they order.
- In cases of food waste, use a scale to measure weight of leftovers, and optionally email the student **feedback** on what to cut from their order.
 - The feedback would be auto-generated based on the weight of the leftovers and the contents of the order associated with the plate.

You are hungry! Go to Bistro. Send an automated Food waste is email with tips on how minimized. to reduce waste. Select a meal at the kiosk. (e.g. General Tso) Yes Nο Price is adjusted based Specify what parts of on food you don't order, the dish you want, and how much. incentivizing reduction. Staff prepare and Is there serve the meal. Your plate is weighed. You eat it. leftover food? Staff collect your plate.

NEXT STEPS

- Discuss the plan with Bistro staff to ensure a smooth transition and determine viable portion sizes.
- Implement the plan and monitor changes in food waste relative to food consumption.
- Conduct surveys to ensure that the amount of available choices is not burdensome for students or staff.
- Expand to other eateries at McMaster, and eventually other universities, adapting to their infrastructure to decrease implementation costs and learning curves.

REFERENCES

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