

Containers Reduced as Reuse

A Proposal for Sustainable
Restaurant Takeout

TransformTO

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Summary

THIS IS OUR MAIN MISSION.

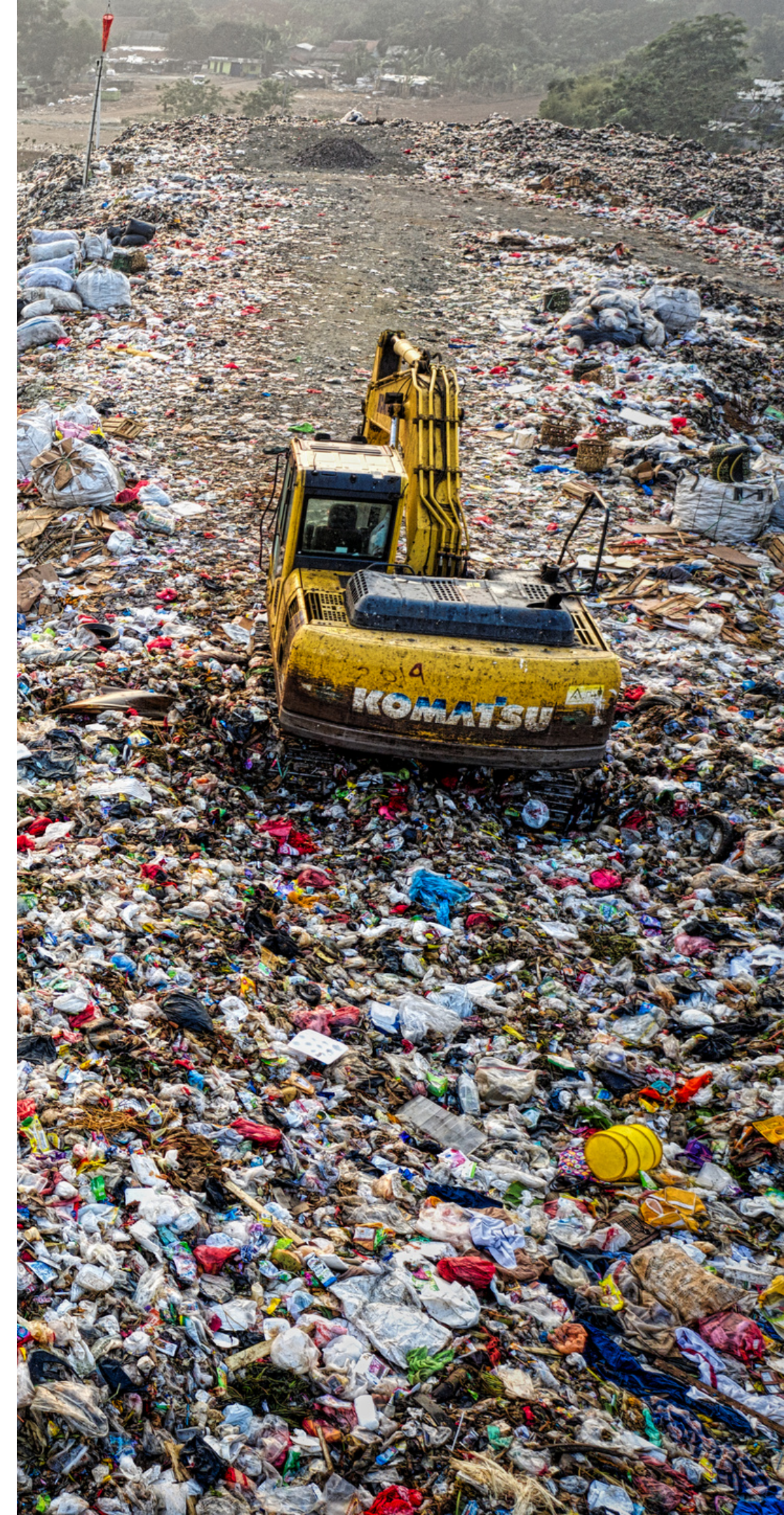
To develop a **sustainable, city-wide strategy for take-out food containers** that contributes to the long-term goals set by TransformTO.

CONTAINERS REDUCED AS REUSE

WHY?

Reducing residential waste and recycling plastics have become even more imperative due to the increase in take-out food orders during the pandemic.

CONTAINERS REDUCED AS REUSE





HOW DO WE DO THIS?

By adopting **Toronto standard reusable containers** and encouraging people to **use their own.**

A Bring Your Own Container (BYOC) strategy

TransformTO greenhouse gas (GHG) reduction targets



95% of waste diverted
in all sectors

by 2025

Gauging the matter at hand

Pandemic has caused an uptick
in restaurant take out food
orders

Achieve a **ZERO WASTE**
circular economy

by 2025

Forces Diagram

"BUSINESS AS USUAL" FORCES

Push of the situation

- **Cost of purchasing take-out containers**
- Contributing to lots of plastic waste
- Possible less use of delivery services which would mean not having to pay the delivery as part of cost of business

Single-use
Take-out
Containers

Habit of the present

- **Not common for customers to carry a container with them for takeout**
- **Using the single-use container can be still convenient than using reusable containers**
- Current take-out ordering system works fine, no immediate need for change

"NEW BEHAVIOUR" FORCES

Magnetism of the solution

- Environment friendly
- Looks good to customer to be part of re-use solution
- Eliminates the need of dealing with too much waste at home
- **Not always having to pay for take-out containers**
- **Might be able to pass on savings to customer**

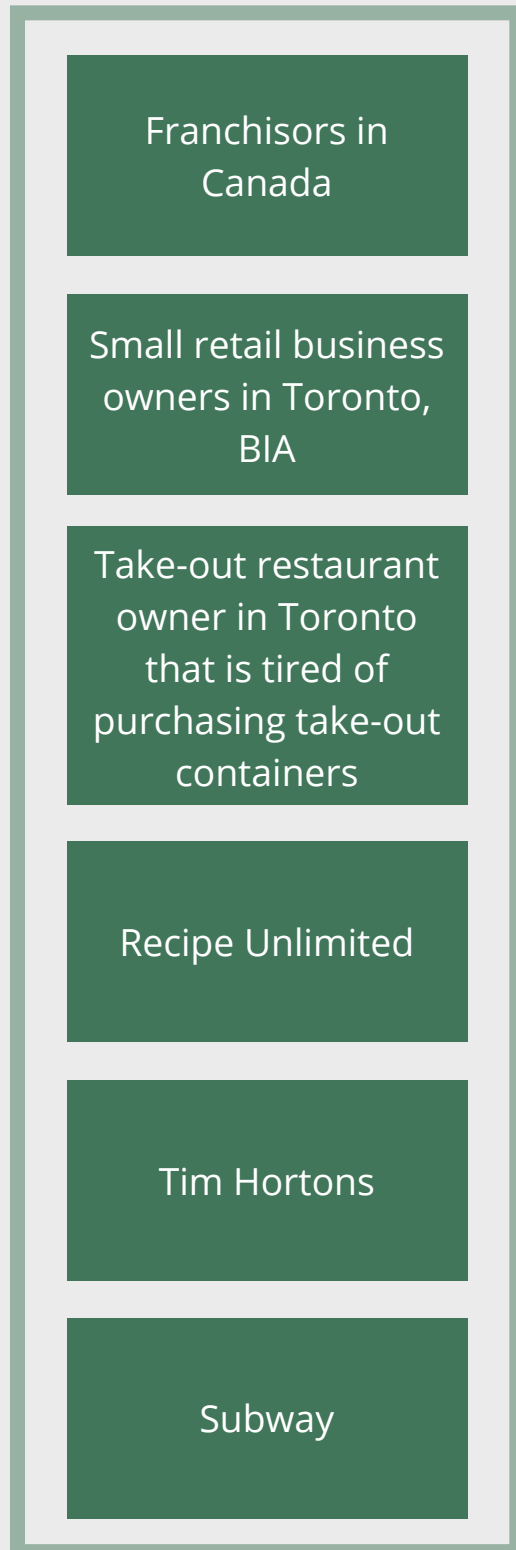
Implement
take-out
container
re-use system

Anxiety of the new solution

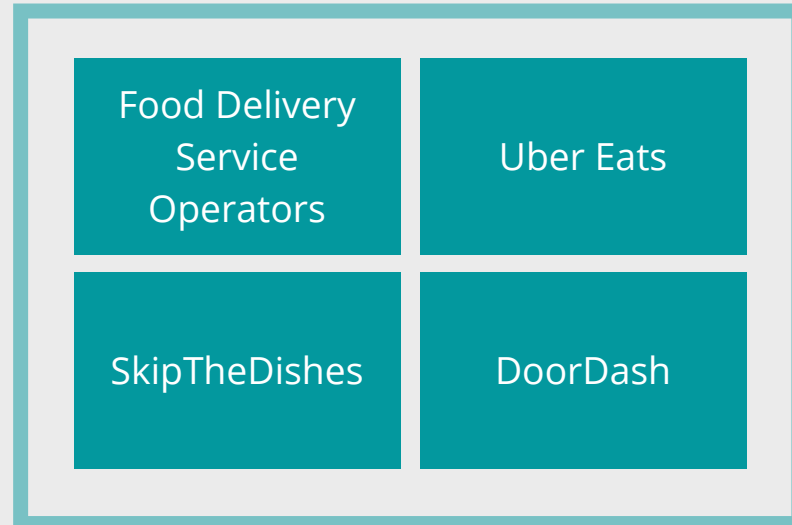
- Could lose customers with the change
- **Having to educate customers to learn re-use system**
- Having staff learn new re-use system
- **"Will it work as intended?"**
- More effort for the customer

Stakeholders

Food Service Corporations/Owners



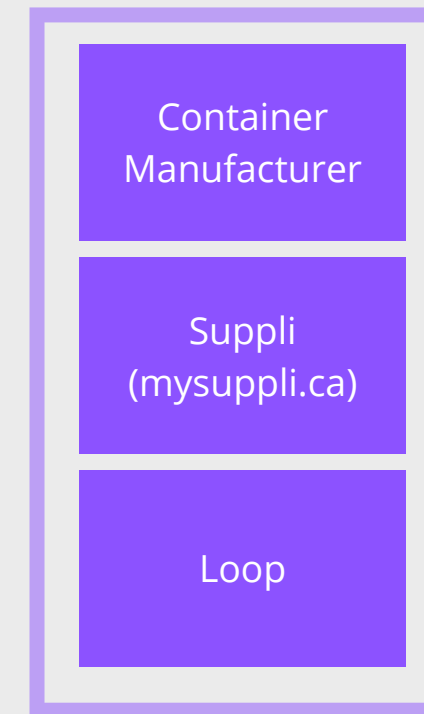
Food Delivery Companies



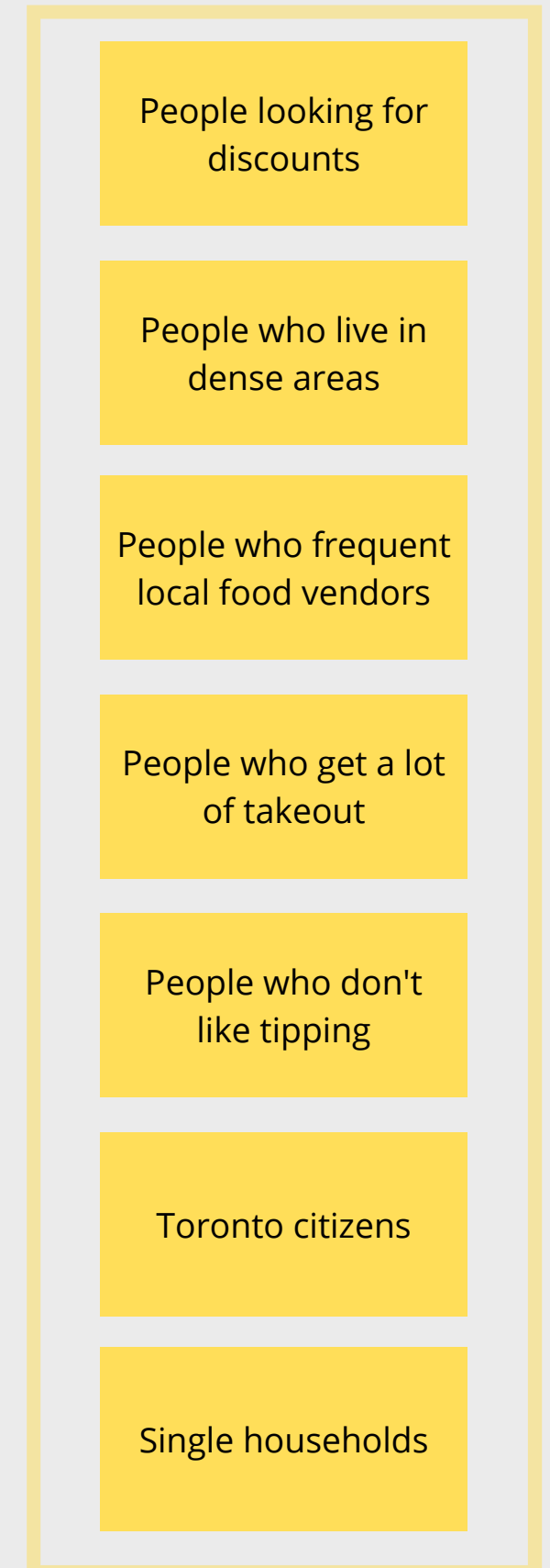
Municipal Government



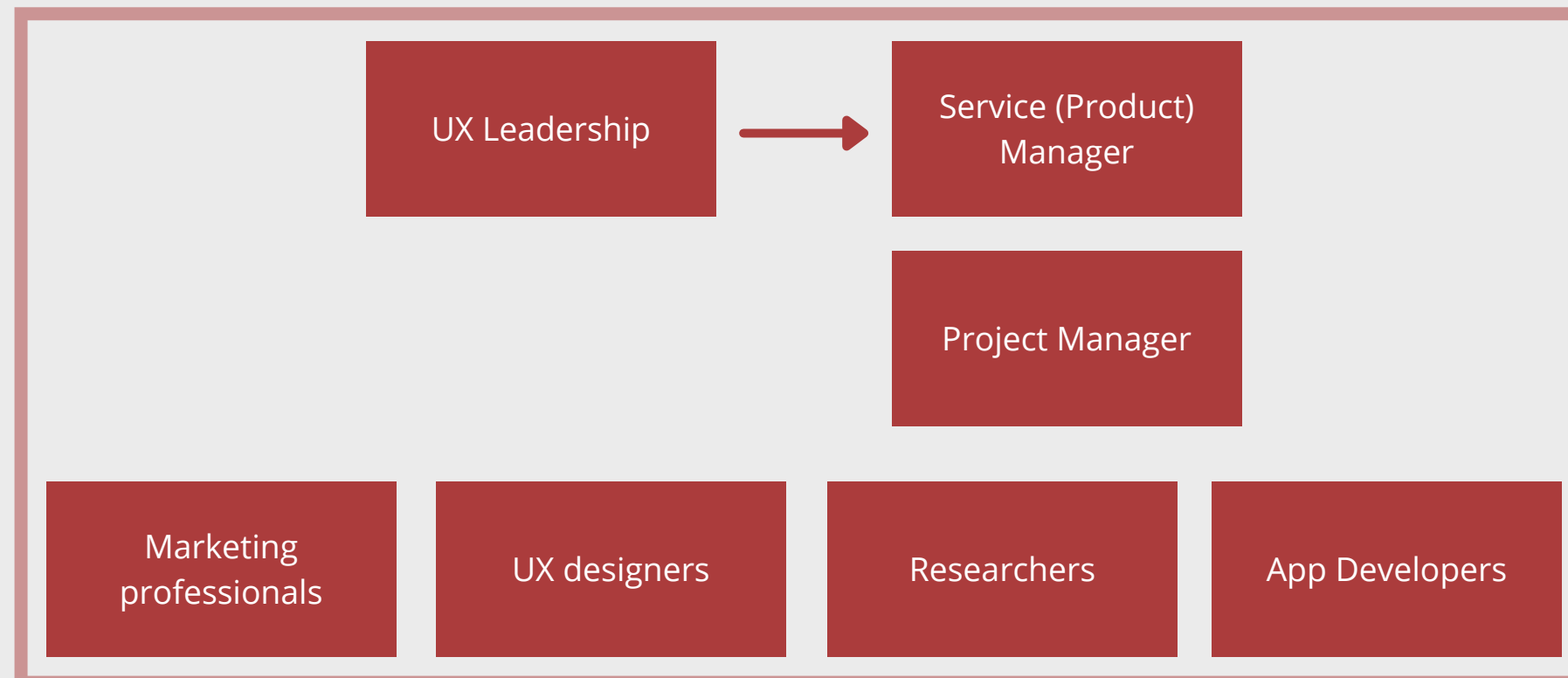
Existing Manufacturing/Logistics Companies



Patrons



Internal UX Team



Stakeholders



Take-out restaurant owner in Toronto that is tired of purchasing take-out containers



Identifying the Stakeholder

Restauranteur (Operations Management)

Take-out restaurant owners in Toronto that are tired of purchasing take-out containers

Roles:

- Manage and operate restaurant/food vending service involving take-out orders
- Prepares/cooks the food that containers would go in

Front of house

Customer-facing service

Back of house

Operations (Line Cook)

STAKEHOLDER EMPATHY MAP

SAYING / THINKING

- Every month I'm having to budget for the expense of buying more takeout containers
- **Having Customers bring their own containers, I might be able to pass the savings on to them.**
- "Plus I'll feel better about not contributing to the waste problem."
- Would be nice if the gov't could provide some sort of tax credit to promote more eco-friendly options
- Would be nice to be part of the solution rather than part of the problem.

HEARING / READING

- Customers say they like support their local restaurants, but they feel guilty about all the take-out container waste -> especially with all the non-recyclable black containers being used by lots of the restaurants for take-out
- Not all municipalities or even regions within the same municipality have the same allowable plastic recycling for the blue-bin
- Eco-friendly packaging costs more -> & not really good for the small margins on business

DOING

- **Buying take out containers on a regular basis**
- Setting up a budget plan for the operation cost
- Offering take-out containers for free to their customers even for dine-in
- Adhering to regional pandemic lockdown rules (takeout only, no dine-in)

MOTIVATION

- **Helping the environment (no guilt, ethically correct)**
- Current: the non-eco-friendly containers are cheaper per unit through conventional means of purchase
- They would rather not have any costs for containers if possible

GAINS

- **Can save money from buying single-use containers.**
- Can contribute eco-friendly environment.
- **Can be viewed by the customer as helping be part of the solution and by supporting our business they could feel good about it**

PAINS

- **Adopting a new plan can be bothersome.**
- Putting their menu into a customer-brought container can be challenging.
- Not sure about offering discount.
- Educating my patrons/customers could come with losing business & could be risky

PESTEL Analysis

Technological Trend

#FOOD2ME
The new age of online
food ordering-mania

1

Social Trend

“Up the Green
initiatives, but beware of
greenwashing!”

2

Political Trend

Carbon Pricing:
The challenge of front-
loading the cost of
pollution

3

Growth of online food ordering services

in the last decade has seen even more prominence under pandemic conditions and will continue.

In 2019, \$1.5 billion in meals have been ordered through food delivery apps

Utilize community “togetherness” momentum to build continuous initiatives towards post-pandemic economic recovery

Consumers could also be stockpiling a lot of containers and feel guilty

Technological Trend

#FOOD2ME
The new age of online food ordering-mania



Increased effort in reducing plastic waste and packaging materials



Social Trend

“Up the Green initiatives, but beware of greenwashing!”

Alternative packaging for businesses in order to reduce impact on the environment

Adopting sustainable packaging material or no material packaging

Less than 11 % of Canada's plastics get recycled.

Government of Canada has been rolling out Carbon Pricing

to provinces which will affect how municipalities implement their strategies

The Canadian Federal Government set out a plan in 2018 that extends to its provinces.

There has been opposition in Alberta, Saskatchewan, and **Ontario**, sparking a debate on federalist politics and law-making abilities on legislation at all levels.

Municipalities will have to devise their tactics based on how the upper levels of government decide to roll out their strategy as a whole.

Political Trend

Carbon Pricing

- The challenge of front-loading
- The cost of pollution



Research Plan

In order to achieve high standards for our solution, we will require comprehensive **empathetic research** focusing on restaurant owners to inform our design approach for **an appropriate pilot program** in the initial phase.

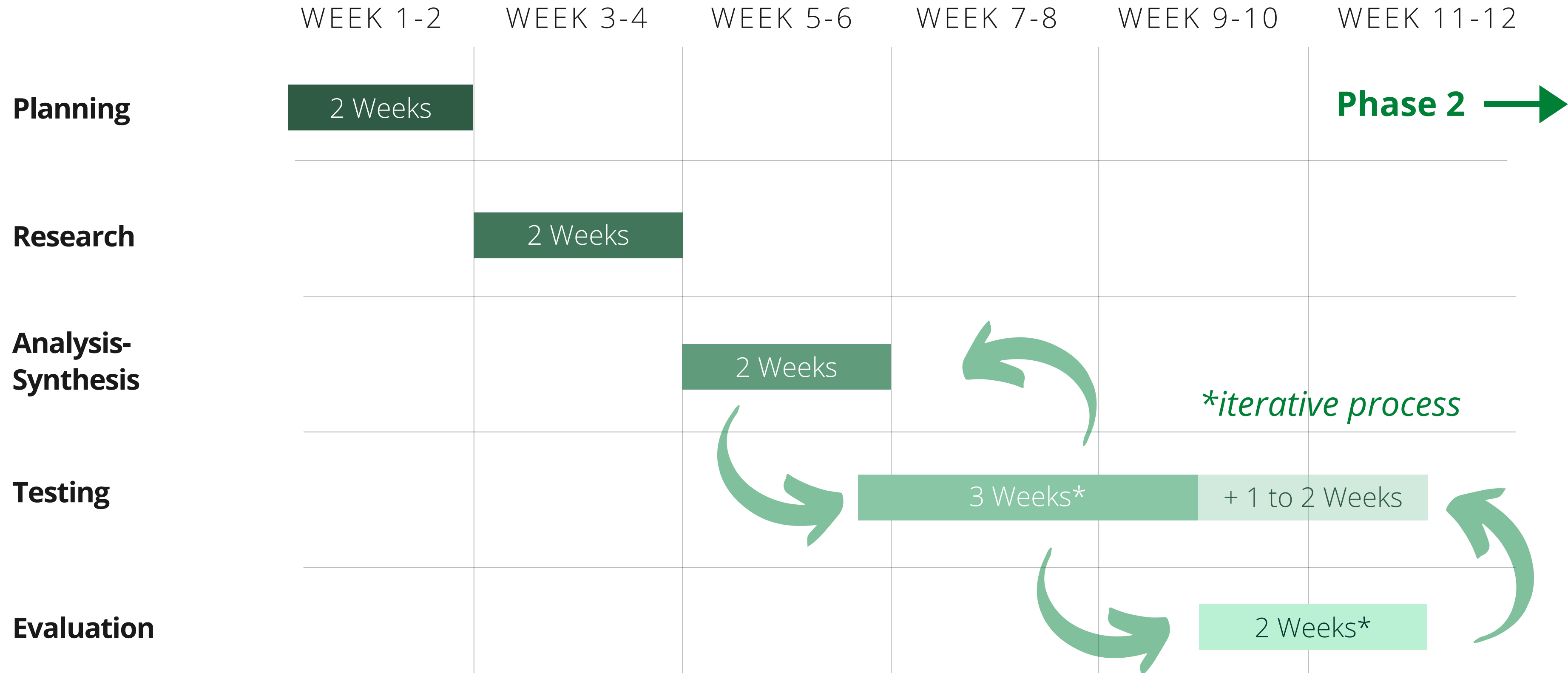
CONTAINERS
REDUCED AS REUSE

Gain better understanding in:

- The scale of the problem
- Operations— How things are currently being done
- Existing solutions and potential innovation opportunities
- Manufacturing and digital development specifications
- Transitioning to alternatives when conditions change

TransformTO

Research Timeline (based on 11 weeks)



Research Plan

Methodologies

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REUSE

Attitudinal vs. Behavioral: Contextual Inquiries

- Researchers visit restaurants to observe operations with take out containers
- Interviews
 - Gather qualitative data of personal understanding and feelings of the current situation
- Evaluate solutions at a tactical level—
 - **What they say they do vs. What they actually do**
- A/B testing for digital interfaces (Phase 2)

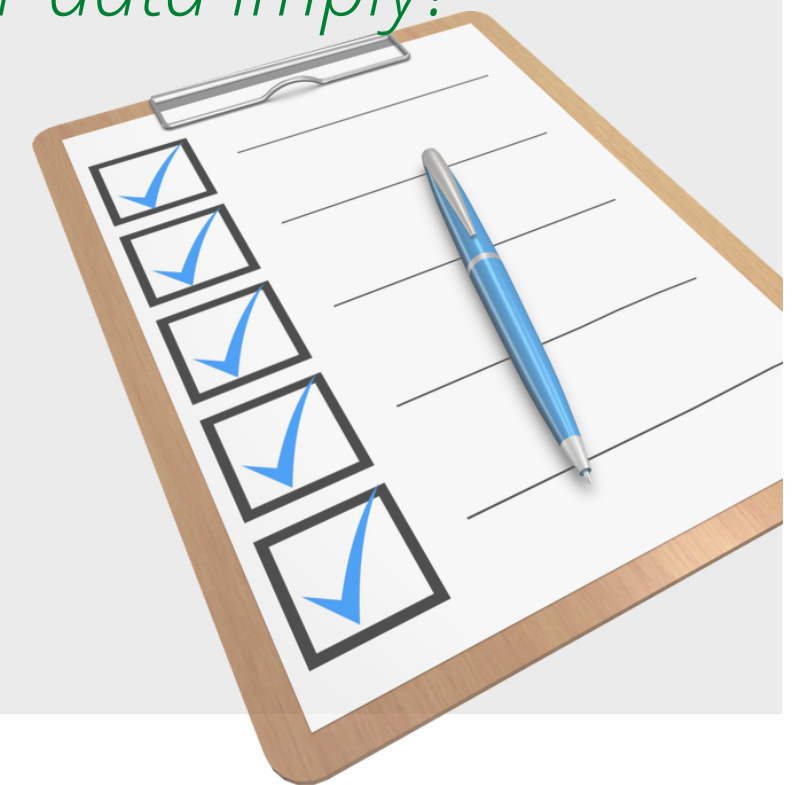
Research Plan

Methodologies

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Quantitative

- Measure results from pilot project for further re-evaluation, compare with pre-solution implementation:
 - *Have we actually help reduce single-use container usage?*
 - *What does our data imply?*



Research Plan

Methodologies

CONTAINERS REDUCED AS
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Secondary Research

- Current situation: Plastic recycling in Canada
- Analysis of existing solutions in other cities around the world
 - **Case Studies**



Research Plan: Data Collection

How we will communicate with our stakeholders

***Due to quarantine restrictions on in-person meetings, communication with participants/stakeholders will be conducted digitally**

1. Screener questionnaire
2. Social Media research
3. Live camera walkthrough of operations or;
4. Video Diary Study
5. Semi-structured Interviews
6. Co-creation Focus Group



**Research Plan:
Further Outcomes**

What does the future hold?

Achieve buy-in from Toronto Business Improvement Areas (BIA)

- Additional Government support in the form of grants and business tax credits.
- Piloting sustainable packaging system to replicating for other industries such as cosmetics and personal care products



CONTAINERS
REDUCED AS REUSE

Design Concept

Containers Reduced as Reuse

HOW MIGHT THE SOLUTION WORK?

Scenarios:

1. Restaurant Merchant
2. Take-out Customer

CONTAINERS REDUCED AS REUSE

Design Concept

Containers Reduced as Reuse

Restaurant Merchant Scenario

CONTAINERS REDUCED AS REUSE

Mr. Lee is worried about his tight budget to run his restaurant made worse by the SHUTDOWN



INCOME STATEMENT

Revenue		
Sales		\$XX,XXX
Expenses		
Salaries	\$XX,XXX	
Rent	X,XXX	
Insurance	X,XXX	
Takeout containers	XXX	
Advertising	XXX	
Net Income		<u>\$XX,XXX</u>

SHUTDOWN \$\$↓
WHERE CAN
WE SAVE \$\$!!

Good that he still can run takeout during shutdown ... but the cost of those containers ...

The Lockdown Takeout Food Mania has allowed Mr. Lee to stay afloat ...



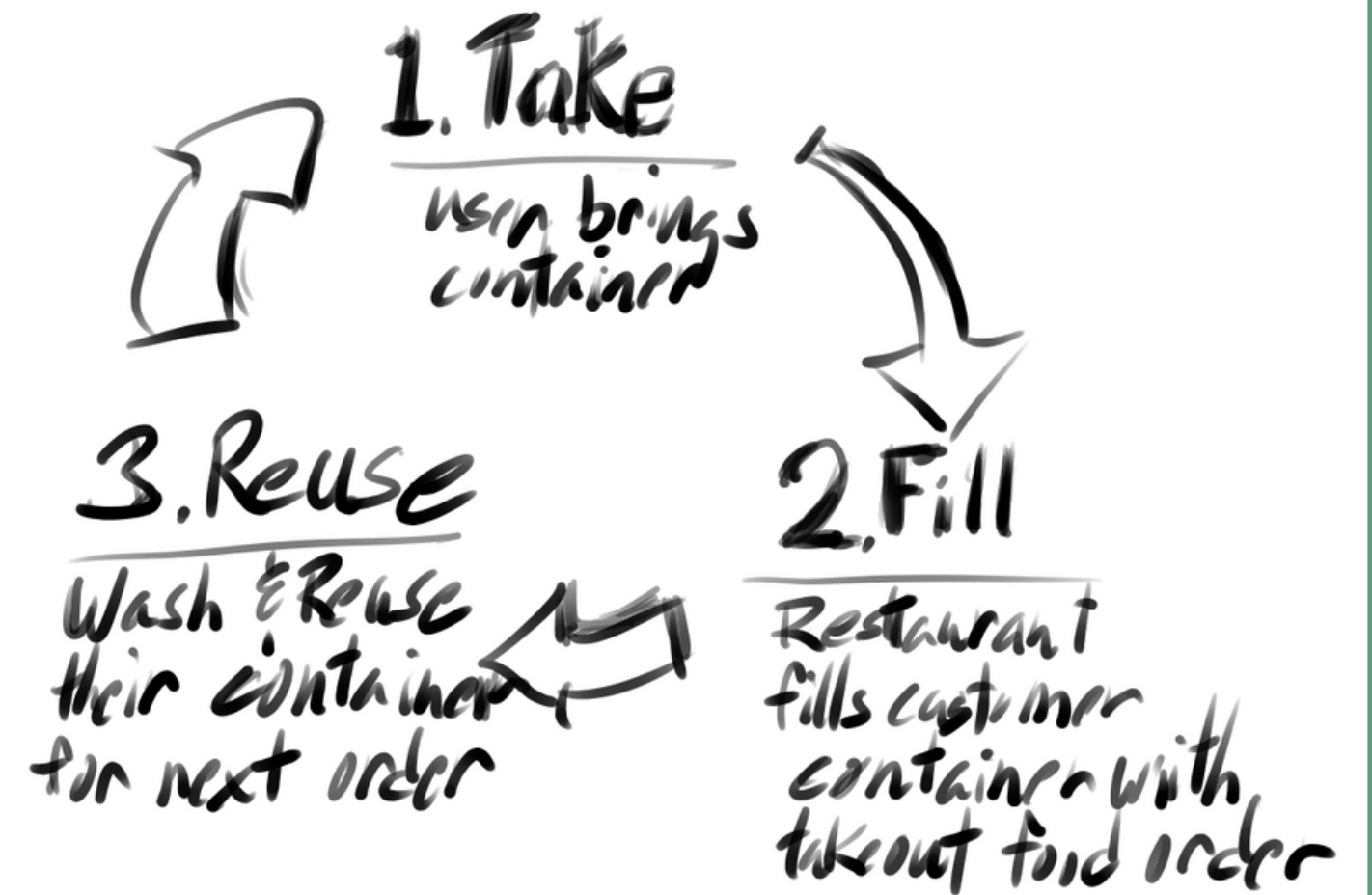
... but Shutdown of Dine-In has cost him.

TransformTO Launch Pilot

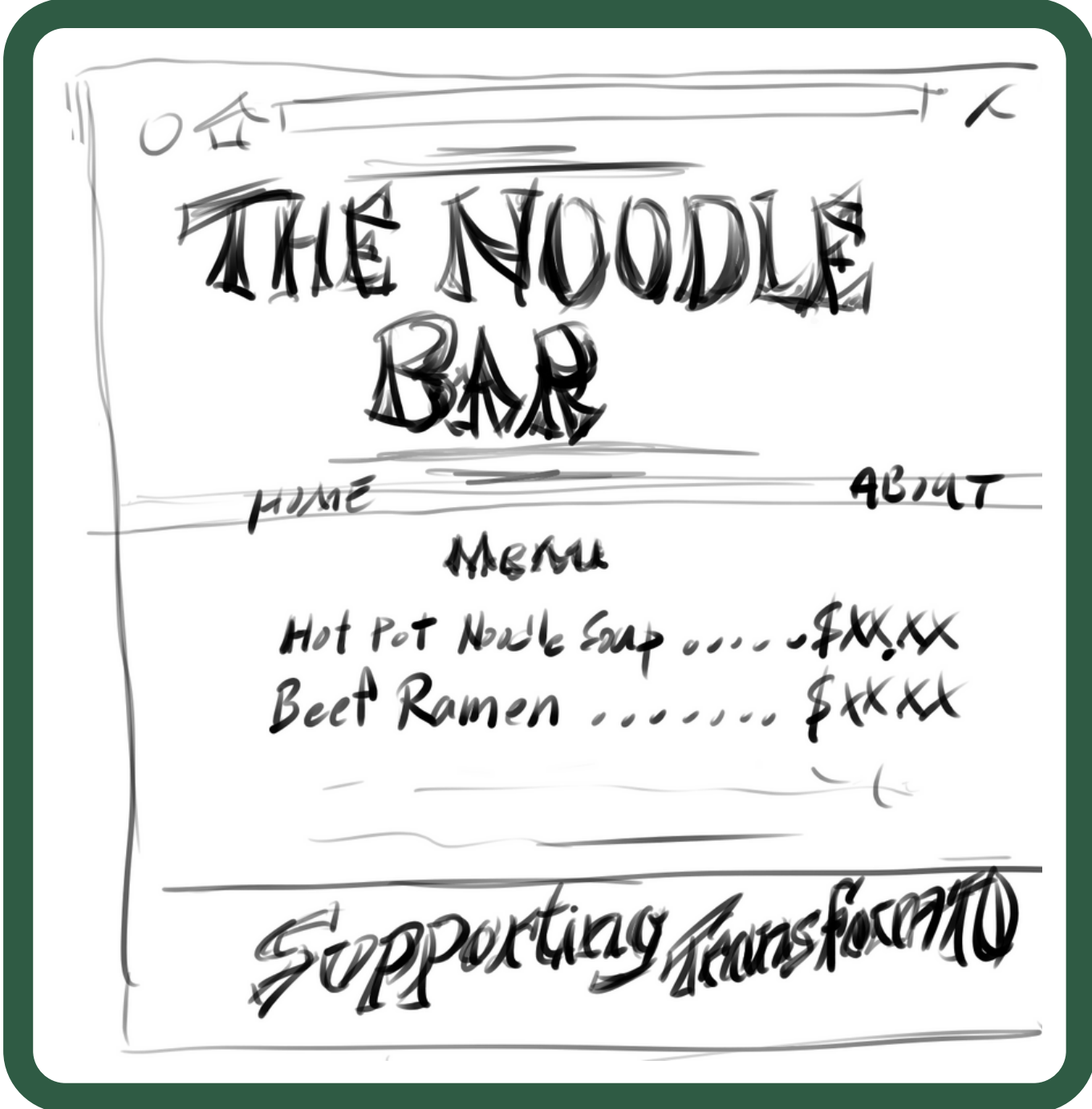


TransformTO climate action strategy spurs development of several initiatives ...

... among them those to address
TAKEOUT FOOD CONTAINER WASTE!!

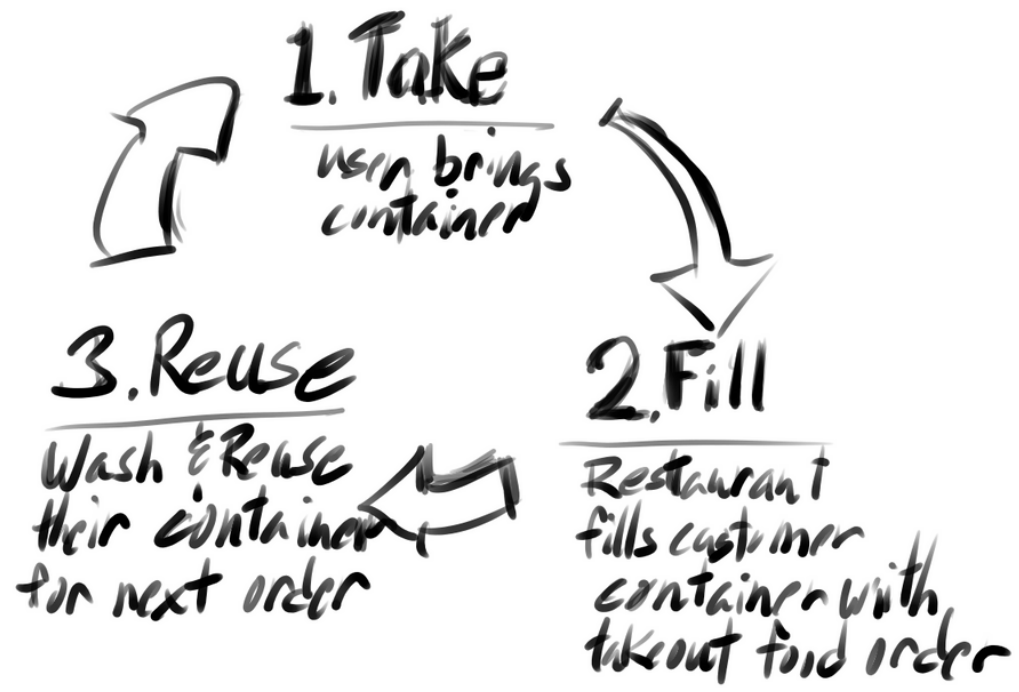


Mr. Lee decides to incentivize the BYOC container idea with his customers.



... it could turn out to be a viable cost-cutting measure.

Certainly, feels good to participate in TransformTO and get a TAX DEDUCTION



TAX DEDUCTION

Expense:
Container Reuse X,XX.XX

\$ KACHING!!! \$

Wow! From being a contributor to our waste problem to being part of the solution!

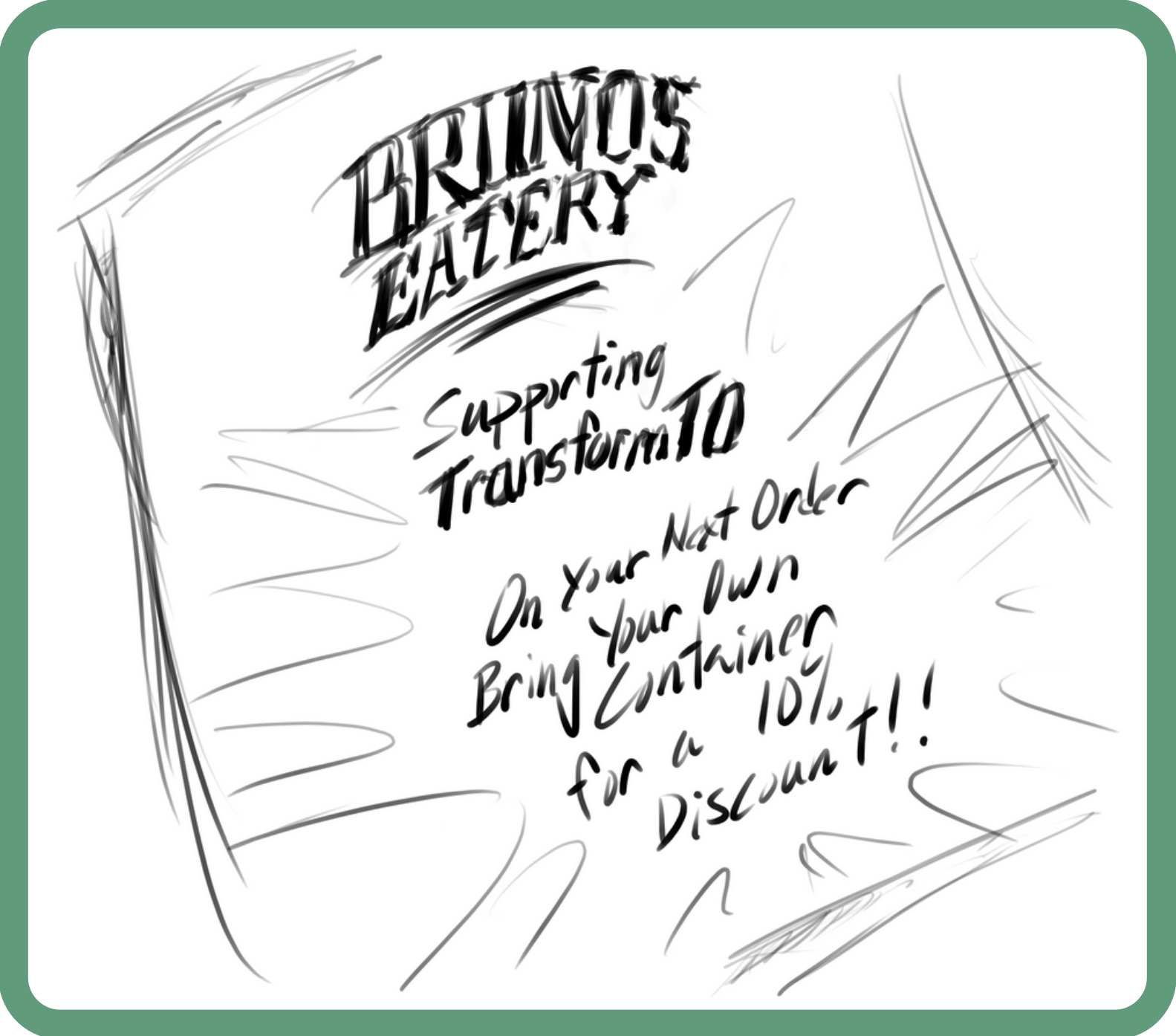
Design Concept

Containers Reduced as Reuse

Takeout Customer Scenario

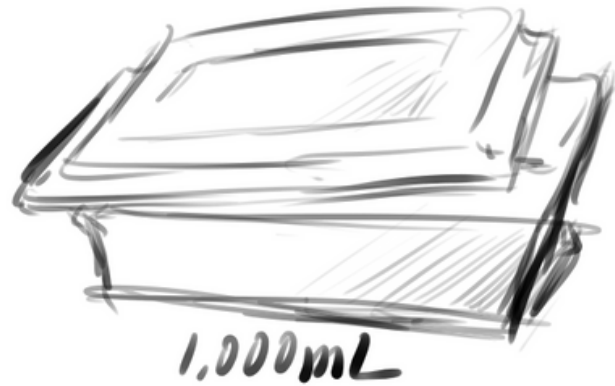
CONTAINERS REDUCED AS REUSE

Patricia is working from home 7 days/wk. Occasional takeout is a nice treat during SHUTDOWN.



... Patricia eyes the flyer from a local restaurant ... it's a place she likes & now with a BYOC discount!

Examples of
Containers we accept!!



You can also
Purchase a
Reusable
Container from us

Checking out the examples of containers she finds some ones she can bring for the takeout discount.

Patricia knows what she wants to order and has the container that should work for it.

BAR

Brown's Bakery

Home

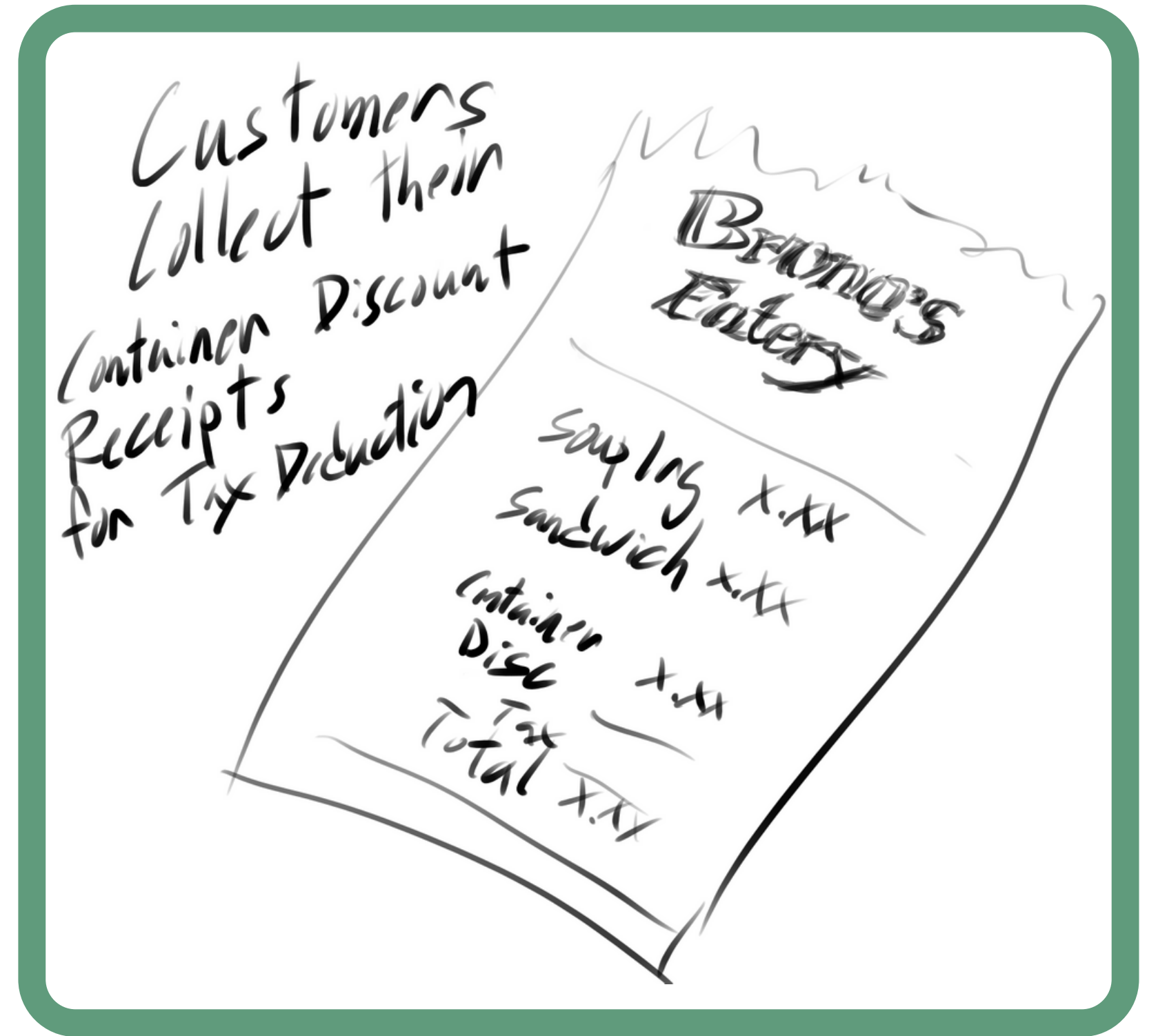
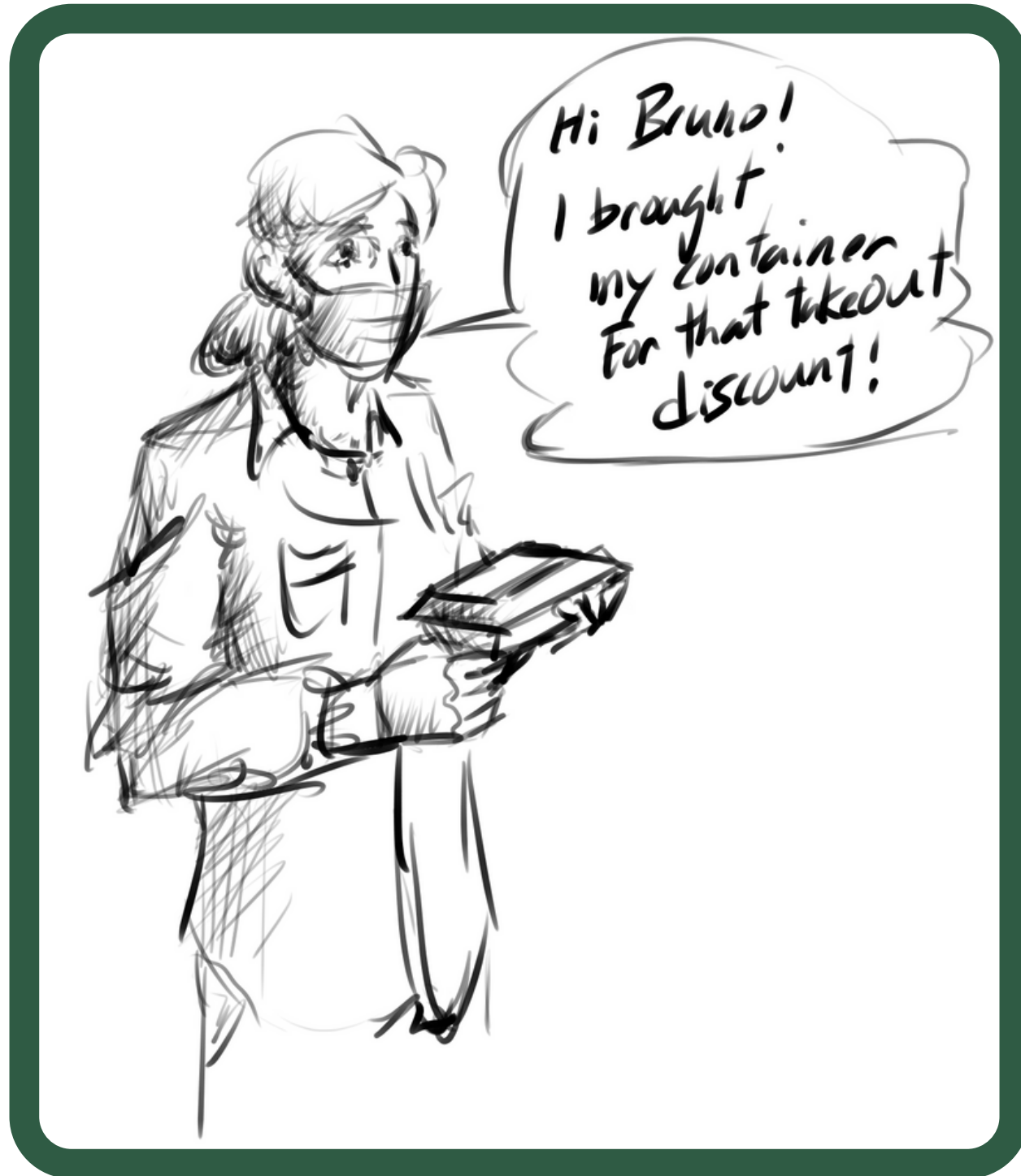
About

Menu

Hoagie	\$.xx.xx
Philly	\$.xx.xx

Supporting TransformTO

Patricia walks over to pickup her online takeout order, with the BYOC discount!

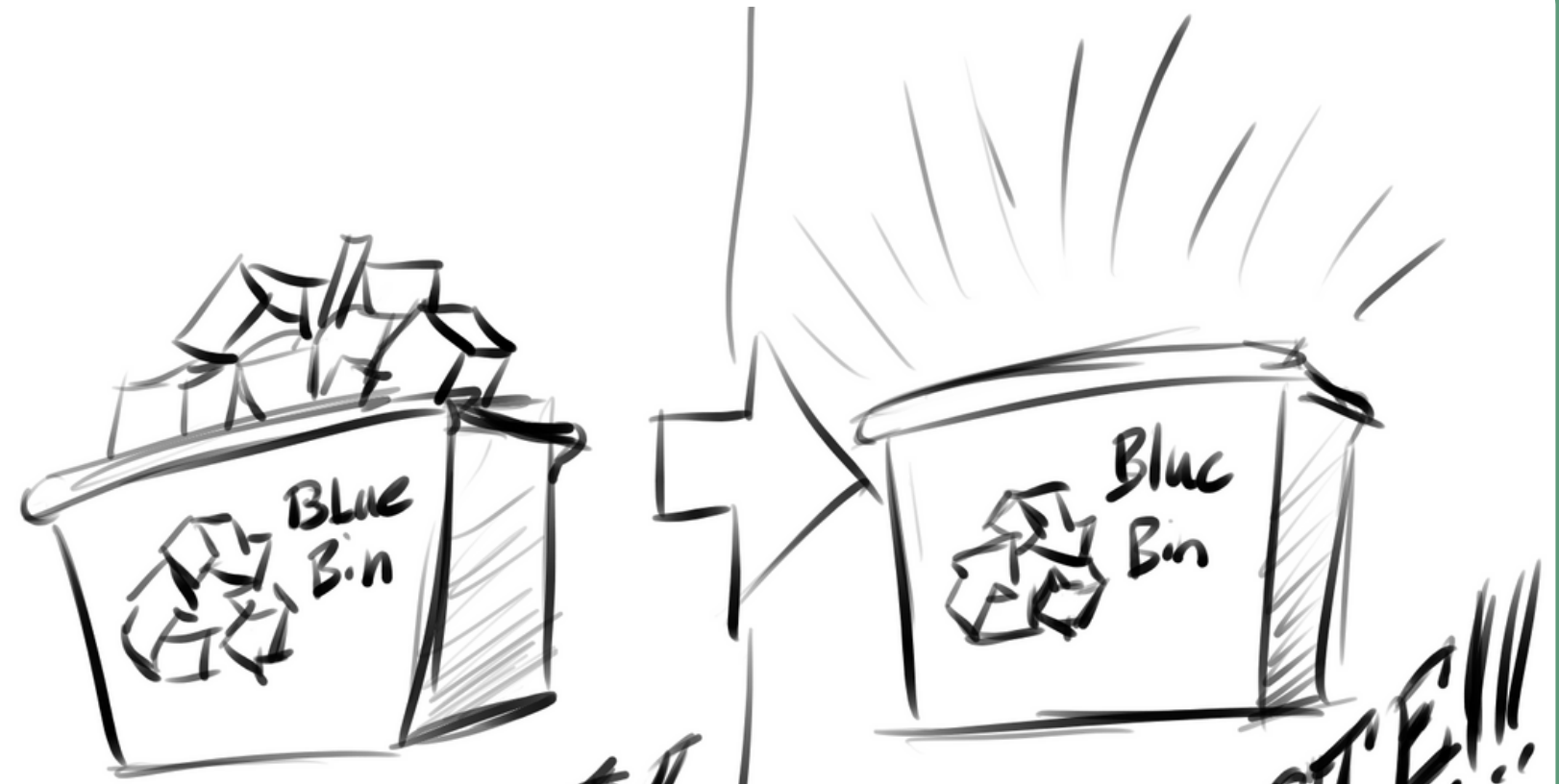
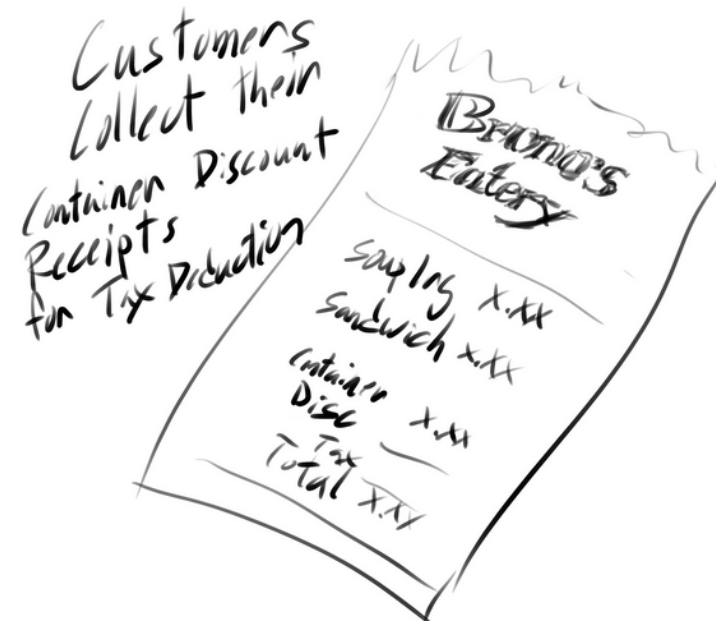
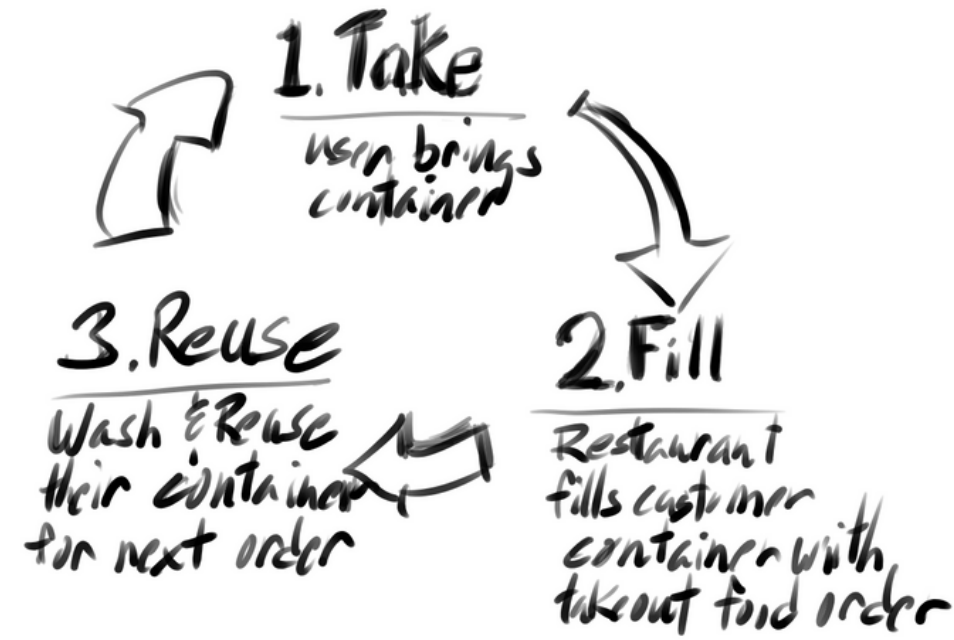


She pays for her order and there's the BYOC discount. Feeling good about not contributing to takeout waste.

Wow! Takeout without the TAKEOUT WASTE GUILT!



"TAKEOUT WASTE!!"



THE JOY OF LESS TAKEOUT FOOD WASTE!!

Less to put in the Blue Bin + the TAX DEDUCTION to look forward to!

In summary



Containers Reduced as Reuse

Making Restaurant Takeout
More Sustainable

Our solution:

Strategy to reduce single-use take-out containers at restaurants.

Involves:

BYOC and standardized reusable take-out containers model

We hope to apply innovative thinking to contribute towards the TransformTO goal of **95% waste reduction in all sectors by 2025**

Thank You!

OUCHANGE