## 1. DEFINING THE CONTEXT

### INTRODUCTION

Through these five posters, we analyze the existing canteen system and introduce a new service concept. Our goal is to provide an affordable, sustainable, and nutritious dinner option.

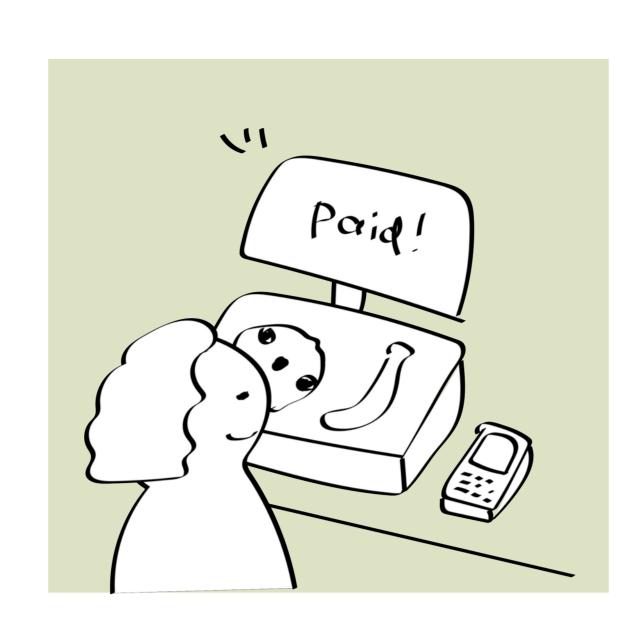
New Service "ReMeal" repurposes surplus food from the university lunch buffet, transforming leftovers into convenient, pre-packaged dinner boxes available for pickup from smart vending machines. This ensures quality meals remain accessible for students who stay late on campus or lack time to cook at home.

## STORY BOARD

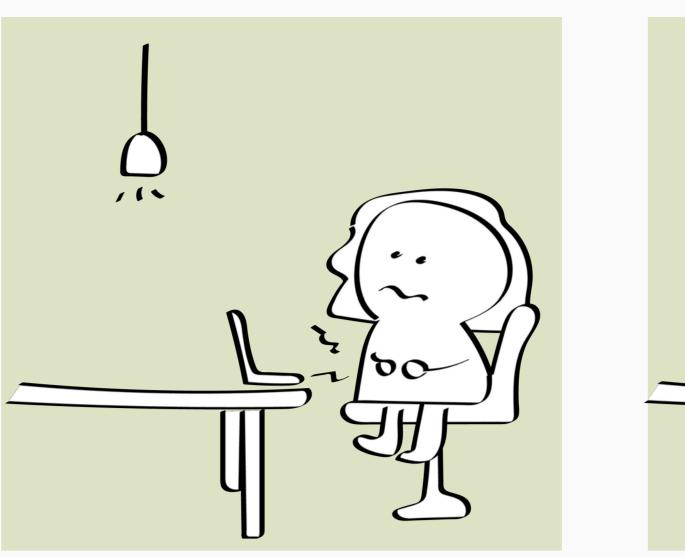
To identify problem areas and explore opportunities for intervention.



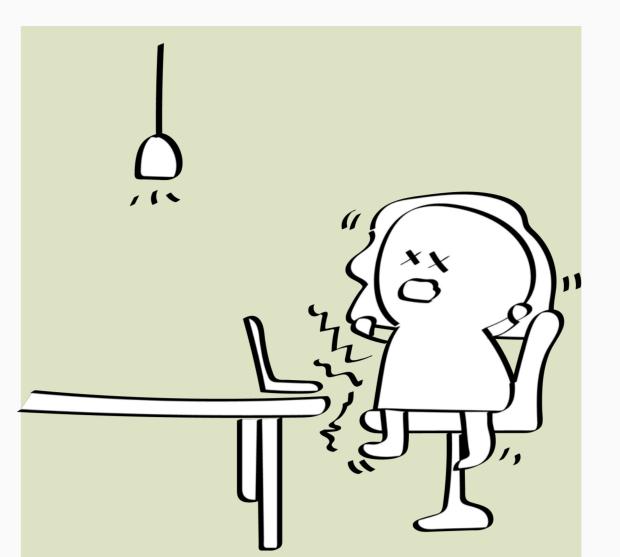
Wants to have a nice and affordable dinner at university



Buys a snack from the canteen as an alternative



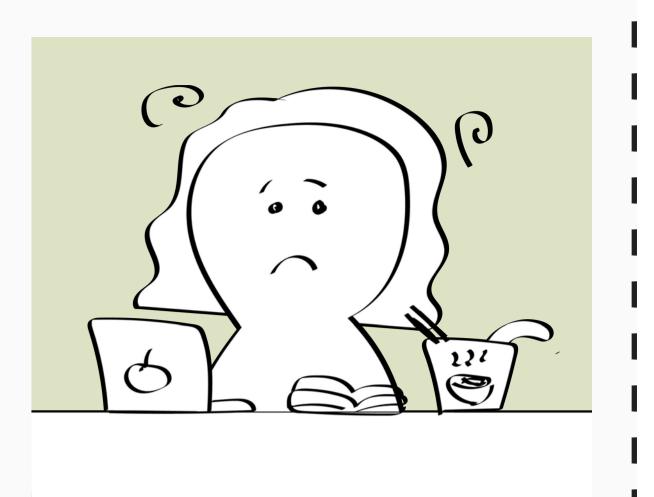
Still feels hungry but tries to Become continue studying and feet



Becomes very hungry again and feels too exhausted to focus



Frustrated by lack of progress but unable to continue, rush to home and ends up buying instant noodles on the way



Eats instant noodles, feels guilty, and remains stressed about studying

### VALUE CONSTELLATION EXPERIENCE

and orders a dinner box

To define "To Be" of new service.

Actions

User requirements & needs

to complete studying by

today

Have dinner at university

Browses the ReMeal app

Collects the reserved dinner box from the vending machine

Takes a break and enjoys a meal in a comfortable area at university.

Feels refreshed and recharged, ready to focus on studying again

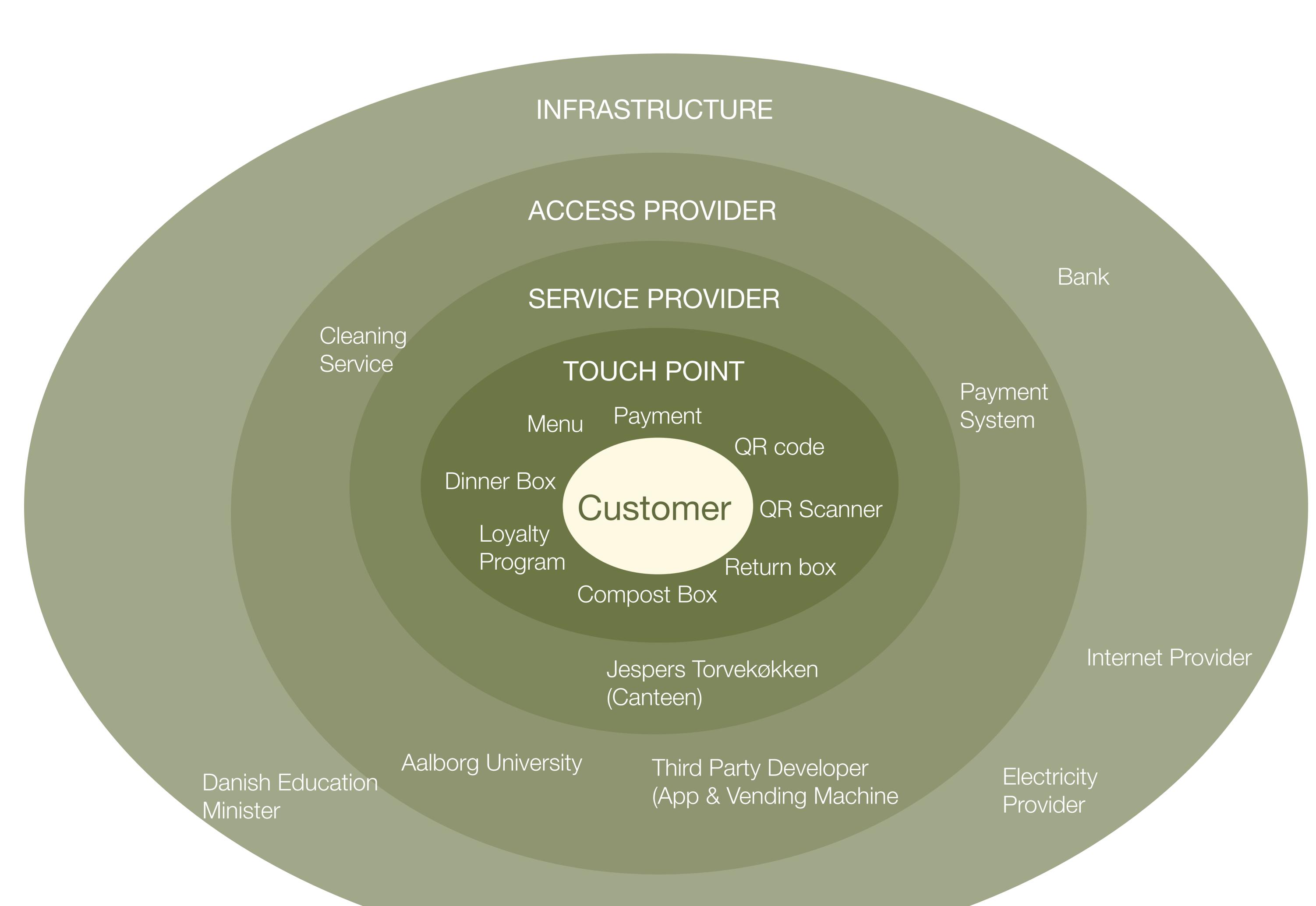
Have dinner at university and complete studying efficiently by today

Goal

#### Problem Area

# ACTORS NETWORK MAP

Analyze existing actors and map new actors and touchpoint to understand overview.

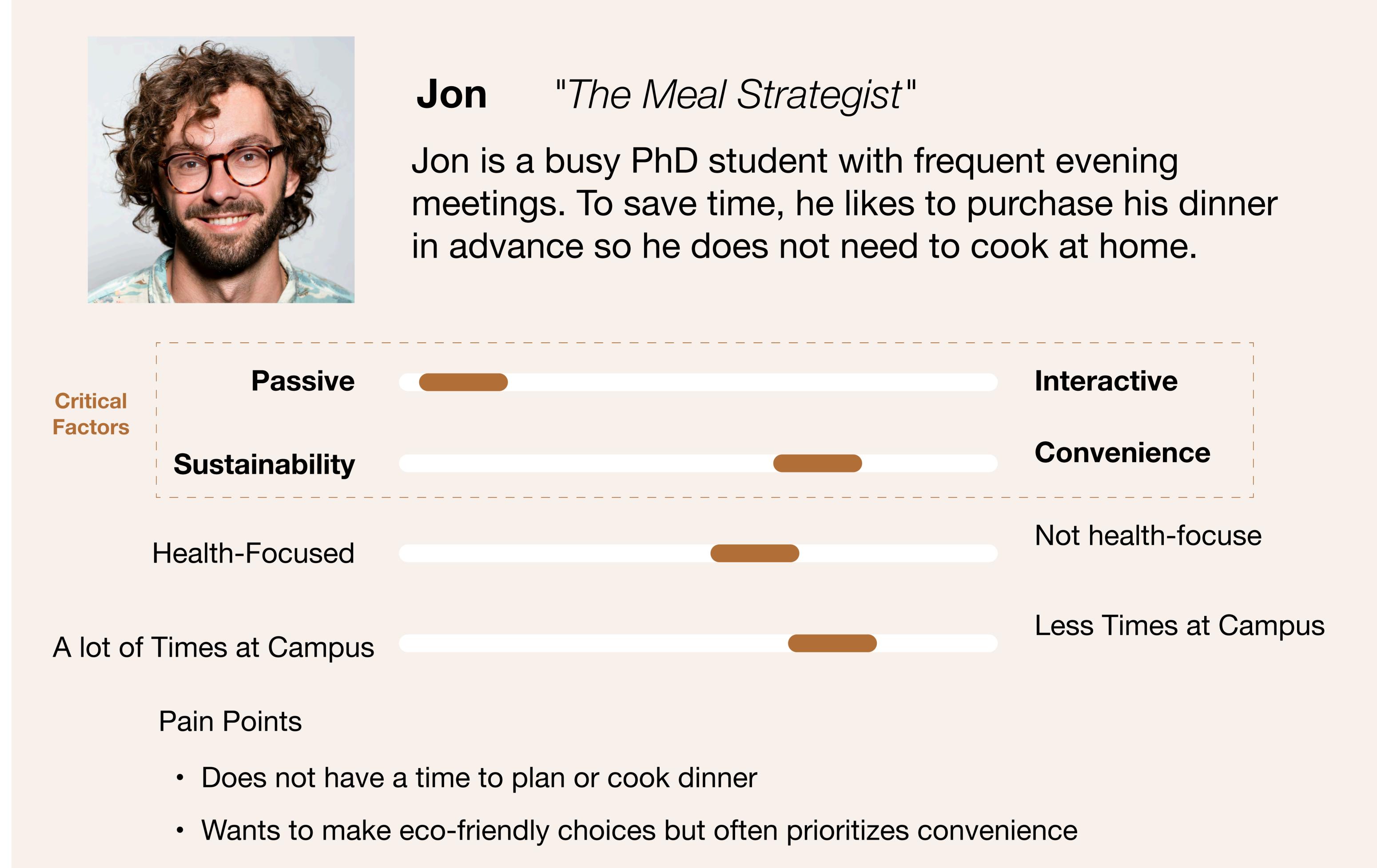


#### **Solution Area** CUSTOMER VALUE CONSTELLATION Analyse existing system and how new service can integrates into and enhances value. Affordable & Sustainable Having a dinner at univeristy Late-Night Snack Dining at University Accessibility Candy store Alternative Meal Options nearby Meal Reservations for Until 3 PM New Vending Fresh Yet Affordable Machine 24/7 Processed Food Dinner Boxes Availability Student Café Local Business Grab and Go Owner Existing Vending station App Machine at canteen Legend Third-Party New Provider Existing Vending Student Developer for New Machine Company Volunteer Group Vending machine and app New Medium Jespers Torvekøkker New Value Aalborg University

## 2. CRITICAL FACTORS AND THE VALUE THE SERVICE

### PERSONAS Focusing on the main service actors.





## QUATTRO STAGION Developing scenarios based on critical factors.

#### **Passive**



#### **ReMeal Dinner Box**

The canteen prepares and packages dinner boxes using surplus food from lunch, helping to reduce food waste while offering affordable and nutritious meal options. The boxes are stored in vending machines, ensuring convenient and accessible pickups



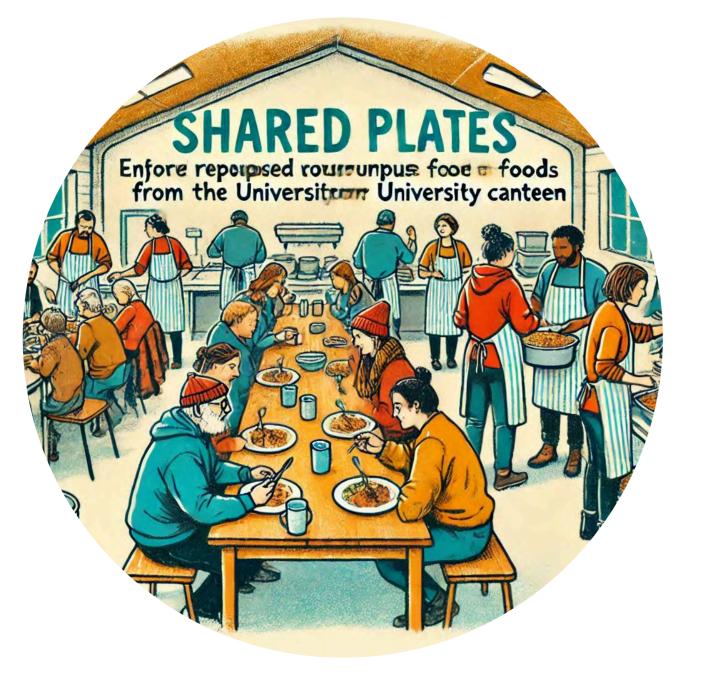
#### **Night Bites**

The canteen operates self-service sandwich stations that remain open 24h, monitored by cameras instead of staff for efficiency

#### Sustainability

#### **Shared Plates**

In collaboration with local NPO, the canteen repurposes surplus food for community kitchens, promoting sustainability and social engagement



# My Special Bowl

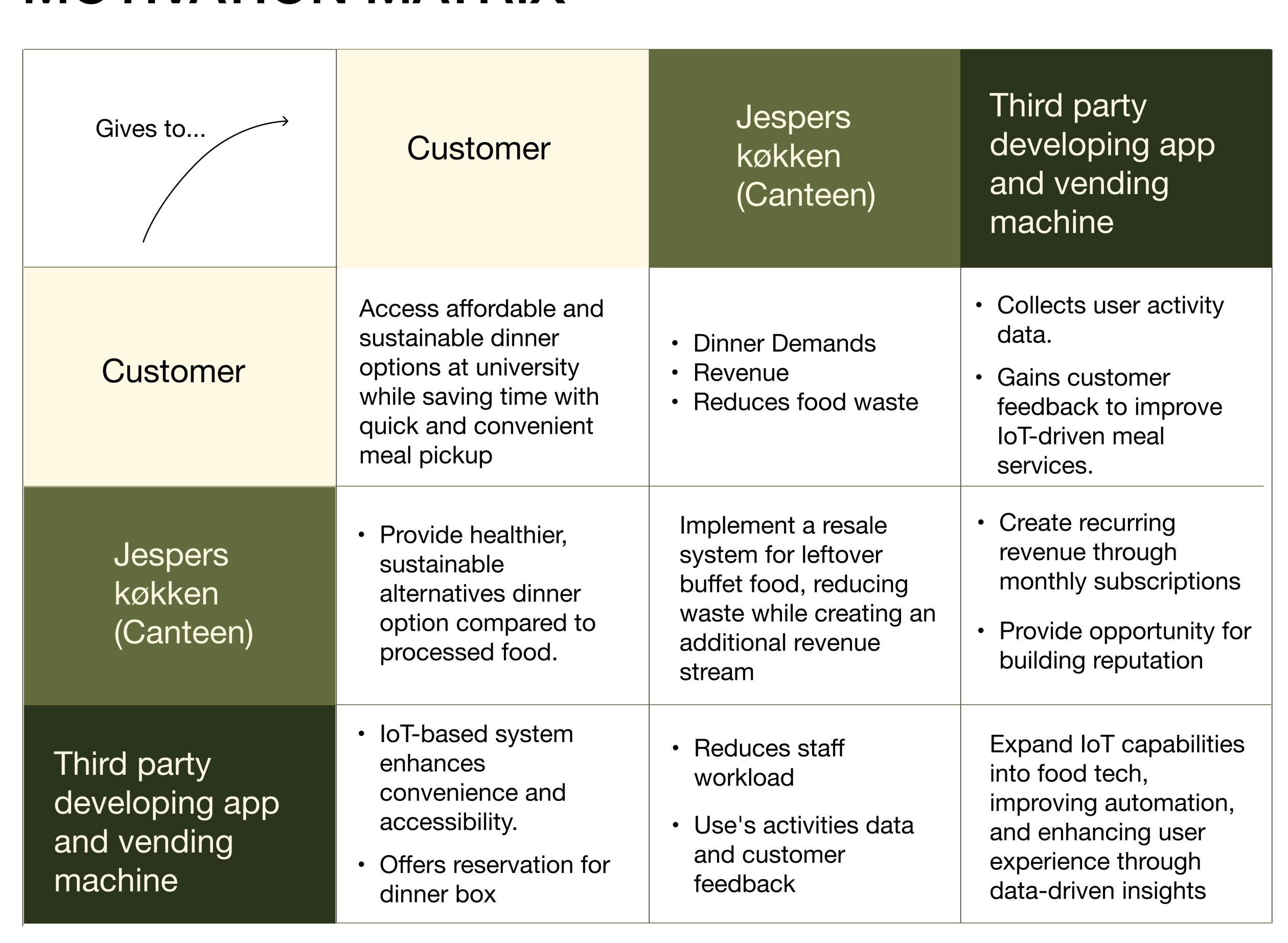
A specialized robotic machine prepares customizable bowls with an a lot of fresh, gourmet ingredients, offering a fast yet personalized dining option



Convenience

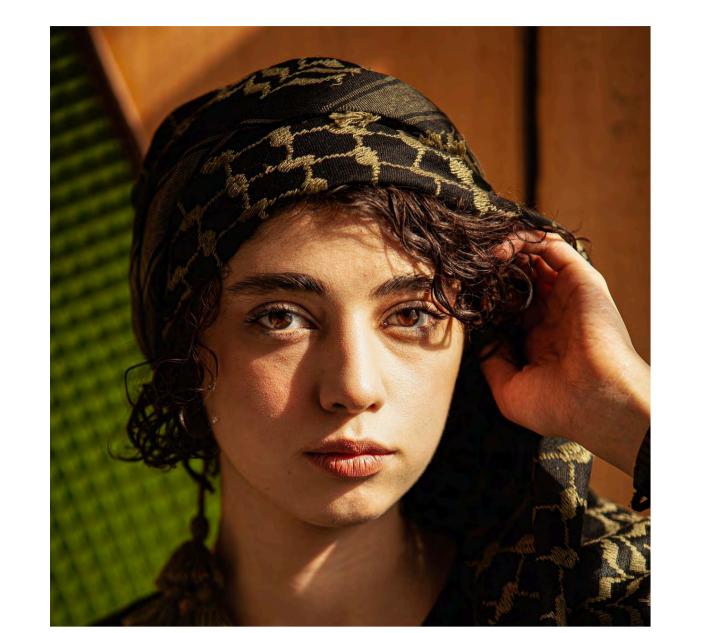
## MOTIVATION MATRIX

To understand the motivations of the actors.



# 3. MAPPING OUT THE SERVICE

SCENARIO To envision design ideas and reveal the system the requirements.



Viktoria "The Eco-Conscious Student"

Viktoria decides to stay at the university after class to complete an assignment due today. To stay focused, she needs a nutritious dinner to get through the day. She has a tight budget but is willing to pay a little extra for a fresh and sustainable meal option.

#### SYSTEM MAP Payment System To understand the system overview, this map helps analyze interaction between actors and touchpoints while illustrating the flow of exchanged values. Payment <sub>I</sub> Update about Users log data App Data base Server Update about Vending Legend Ordering Machine Dinner box **Emptied box** System Boundary and app Send Information Flow - - - -Stock dinner box Physical Matters Flow ——— Money FLow Monthly subscription

## COSTUMER JOURNEY MAP For a diachronic depiction of the customer experience.

Time	14:00	14:10	16:00	18:00	18:10	20:00	20:03	20:05
Stages	Pre-ordering	Ordering		Collecting	Dining	Retur	ning	Completion
Actions	Decides to stay Open the app, at university browse and study until available dinner 8 PM box options	Selects a dinner Reviews and Receive a box and places accepts the 30 confirmation an order kr container and a QR code deposit. for collection	notification	Low on energy, Scan the QR she heads to the vending machine her dinner box in the canteen		study session, she walks back the to return the	loyalty update via the app. Since it's a rainy day, she	Leaves the university satisfied with the quality, price, and sustainability
Feeling								
Thinking	<ul> <li>I do not want to deal with a complicated process.</li> <li>I am not sure if this service is trustworthy.</li> </ul>	• I want to save money, but I am willing to pay a		et to pick up my order?	• Can I leave a review anonymously?	<ul> <li>How do I rede coupon next time</li> <li>What happen box is full?</li> </ul>	∋?	<ul> <li>Is there a benefit if I invite my classmates to use this service</li> <li>Will I be charged a penalty if I accidentally break or dispose of the box?</li> </ul>
Opportunities (Preventions)	<ul> <li>Conduct user testing, ensure intuitive user experience</li> <li>Display user reviews and ratings on the app for transparency</li> </ul>	<ul> <li>Clearly display meal descriptions, ingredients</li> <li>iews and ratings</li> </ul>		rmation screen when user purchase pick up same day)  ly about no pickup no refund policy phrase atic push reminders	Offer an anonymous review option in the app.	<ul> <li>Send automation when they are free meal</li> <li>Pop up map ald drop-off location canteen</li> </ul>	eligible for a ternative	<ul> <li>Introduce a referral program</li> <li>In app ordering step clearly state the penalty policy upfront. If user fail to return by the time of next purchasing 30kr of deposit will not be refund.</li> </ul>
Touchpoints								

# 4. DEFINE DETAILED SERVICE REQUIREMENTS

## SERVICE ENCOUNTER Returning dinner box to vending machine at canteen

Use Case 1	Returning a Dinner Box with Leftovers  After finishing dinner, the customer tries to return the box to retain the 30DKK deposit.
Actors	1 Customer
Pre-condition	<ul> <li>The customer arrives at the vending machine with the used dinner box</li> <li>There is leftover food that needs to be disposed of</li> </ul>
Flow of events	<ul> <li>The customer disposes of leftover food in the compost bin attached to the vending machine</li> <li>The customer places the box into the return slot attached to the vending machine</li> <li>The vending machine scans and validates the returned box</li> <li>The vending machine displays a confirmation message and prompts the customer to open the app</li> </ul>
Post-condition	<ul> <li>The customer successfully returns the dinner box</li> <li>A confirmation notification is sent via the app</li> <li>The customer earns a stamp toward the loyalty reward program</li> <li>The 30 kr deposit is retained</li> </ul>

Use Case 2	Return Slot Unavailable Due to Full Capacity  The customer attempts to return the dinner box at the vending machine but is unable to do so due to limited capacity. A temporary return solution is provided.
Actors	1 Customer
Pre-condition	<ul> <li>The customer arrives at the vending machine with the used dinner box</li> <li>The customer does not have leftover food that needs to be disposed of</li> <li>The vending machine is operational but has reached full capacity and cannot accept additional returns</li> </ul>
Flow of events	<ul> <li>The customer places the box into the return slot attached to the vending machine</li> <li>The vending machine scans and validates the dinner box but rejects the return due to lack of space</li> <li>The vending machine displays an apology message, confirming that the customer's 30 kr deposit is secured</li> <li>The display provides a map directing the customer to the designated temporary return area at the canteen</li> <li>The customer walks to the designated temporary return area and places the dinner box there</li> </ul>
Post-condition	<ul> <li>The customer successfully returns the dinner box via the temporary drop-off point.</li> <li>A confirmation notification is sent via the app</li> <li>The customer earns a stamp toward the loyalty reward program</li> <li>The 30 kr deposit is retained.</li> </ul>

# 5. HOLISTIC VIEW OF THE SERVICE

### SERVICE BLUEPRINT (Return System) A detailed and structured overview of the actual service processes.

