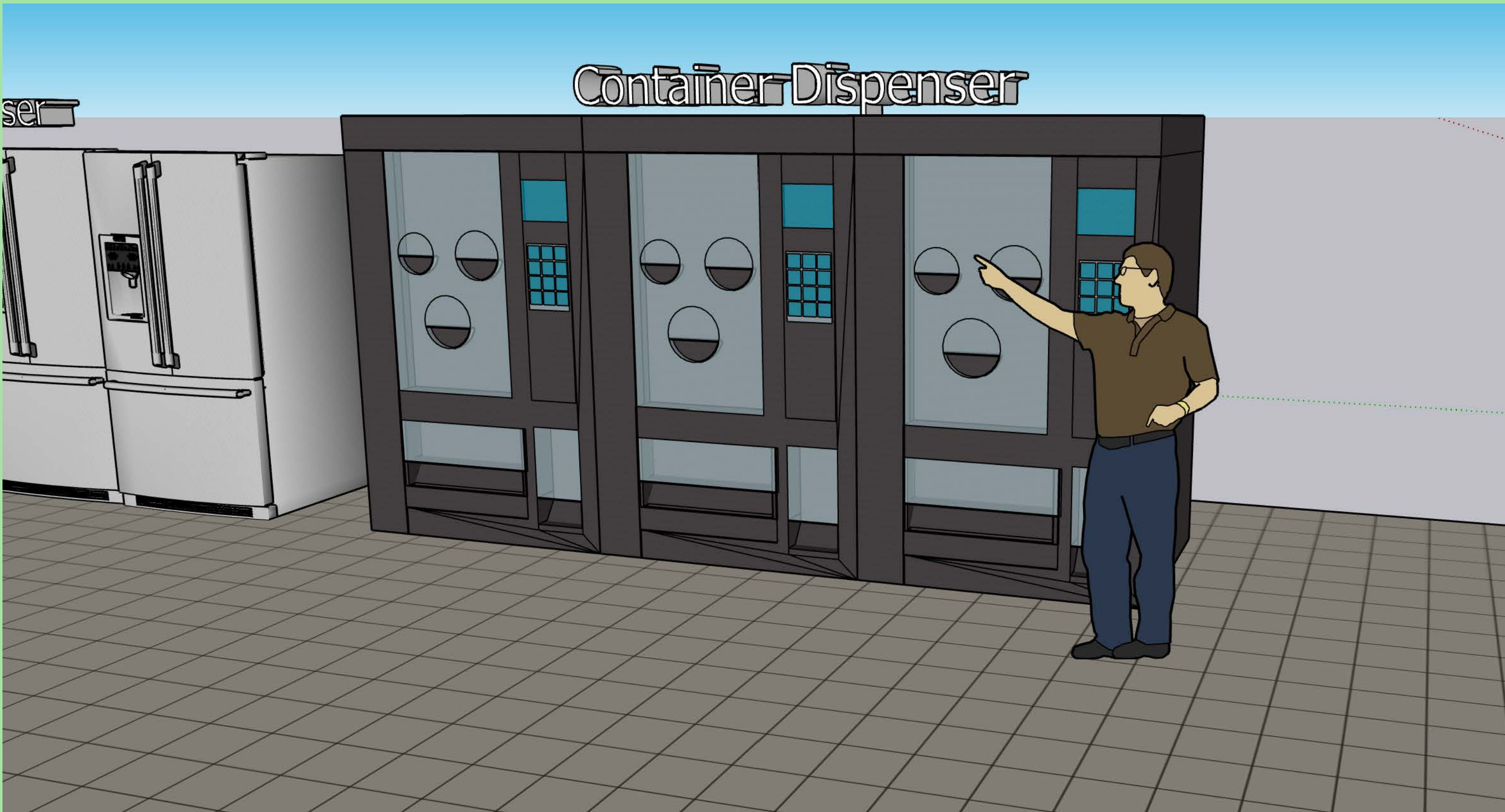


# CLEAN 2 GREEN

## GROUP #03

Concept proposal for battling ocean plastic by reducing single-use plastics. Specifically through the extension of the bulk refill store concept by offering refillable containers of liquids in addition to bulk products



# CONTAINER DISPENSER

- Touchpad for interaction
- Cash card hole for payment
- QR scanner for customer recognition
- 3 holes for with autoated flaps for container return
- Large square hole with flap for container dispensing



## PRODUCT DISPENSER

- Hole for container placement
- Distance sensor for container recognition and product dispensing trigger
- Dispensing nozzle

## EMPLOYEE AT HELP DESK

- Support client during registration
- Intervene in case of system errors
- Refill machines
- Maintain machines

## MATERIAL SELECTION & CONTAINER TYPE

### HDPE (High Density Polyethylene containers):

Material chosen amongst 8 plastic types due to its properties such as:

low leaching  
high re-usability  
low price

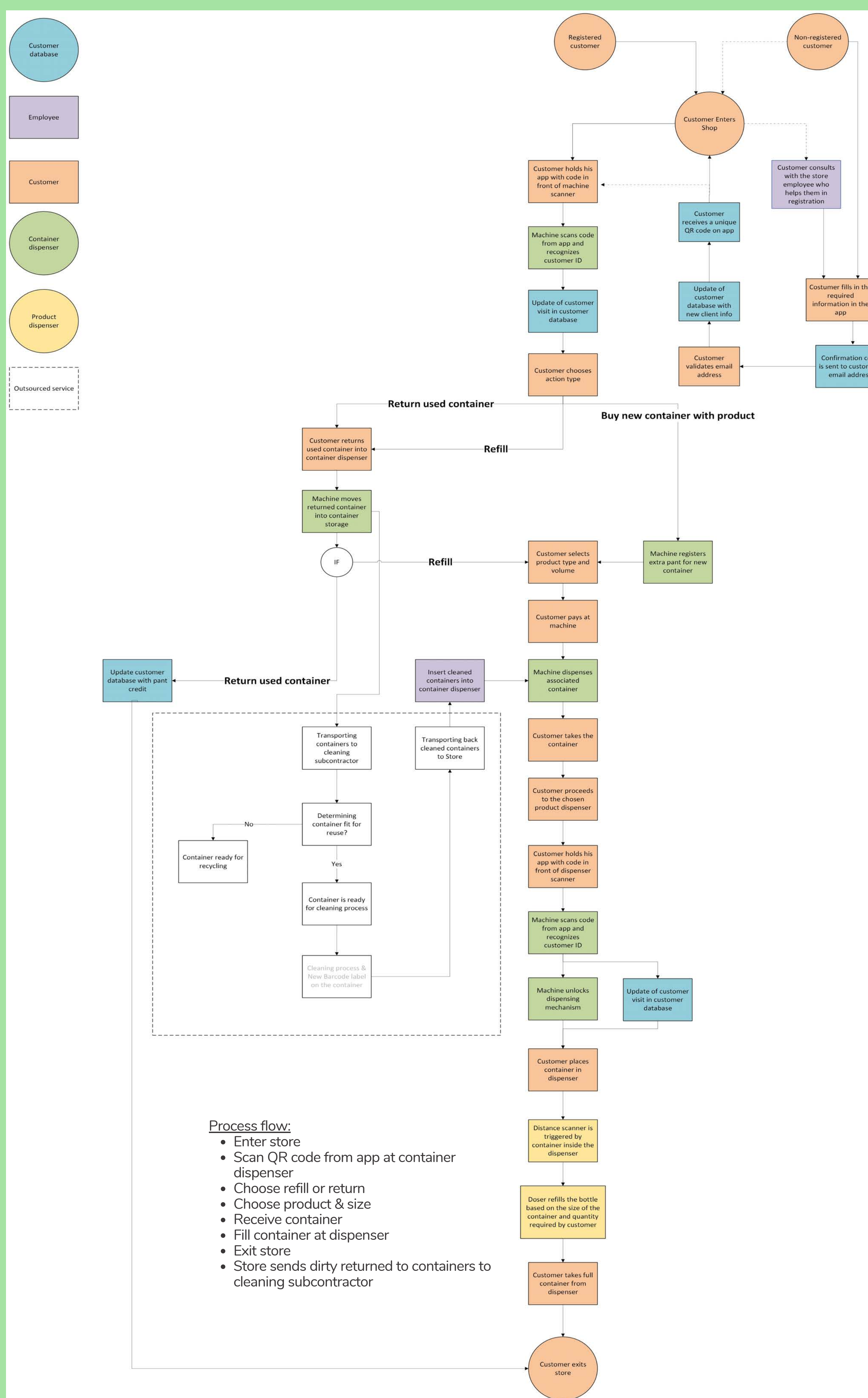
high recyclability  
medium rigidity



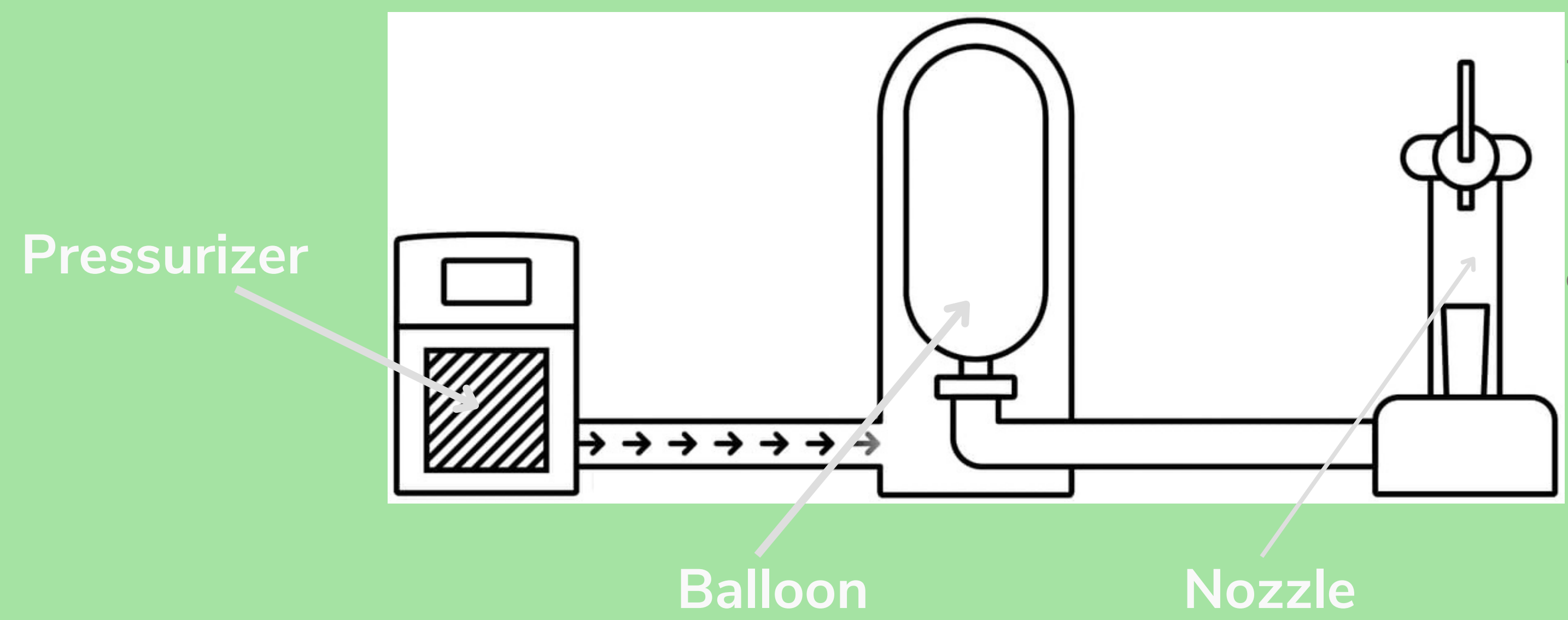
| Container type           | Container lid | Product                                        |
|--------------------------|---------------|------------------------------------------------|
| 500 ml cylindrical box   | twist top lid | Yoghurt                                        |
| 500 ml bottle            | twist top cap | Milk, Cream, Juice, Oil                        |
| 500 ml squeezable bottle | flip top cap  | Shampoo, Shower gel, Soap, Mayonnaise, Ketchup |

## DISPENSING MECHANISM

- Mechanism provided by "Draughtmaster"
- Detachable nozzle dispenser for easy refill (with 20L capacity)
- Built-in cleaning procedure
- Adaptable pressure and pipe diameter depending on product viscosity



## SURVEY



| Types of Companies         | Contacted | Answered | Relevant |
|----------------------------|-----------|----------|----------|
| Concept Business Companies | 2         | 1        | 0        |
| Cleaning Companies         | 4         | 2        | 1        |

