

# ENERGIA

Design for evolving  
scenarios

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# Klèn

spread the drop

**Politecnico di Milano**

School of Design, Product Service System Design  
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## AM 5

AM 5 is a group of people with diverse backgrounds who have come together for a common challenge: to design a product service system to cope with the energy crisis the world is experiencing.

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# Context Research

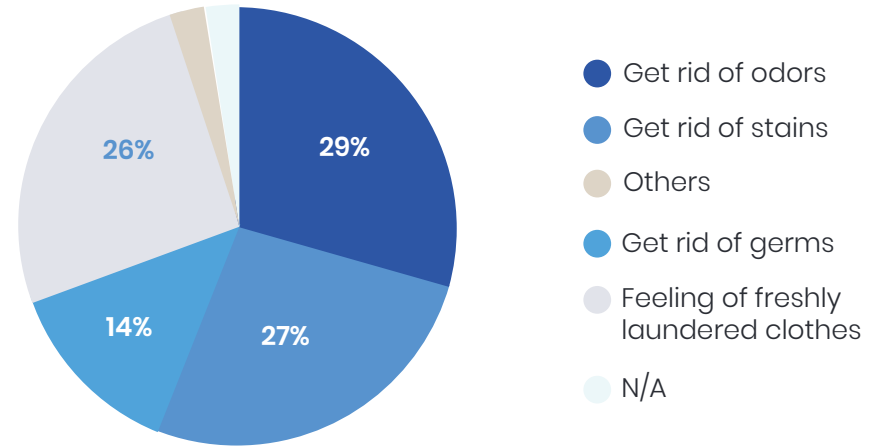
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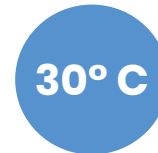
# How do people take care of their clothes?

The data from a report by Electrolux shows that a majority of people wash their clothes to get rid of odors. Moreover, 68% people wash their clothes even if there are not enough clothes for a full load of a washing machine, which is both wasteful in terms of energy and water, and also costly for the users.

Why do people currently wash their clothes?\*

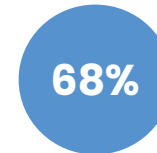


### TEMPERATURE



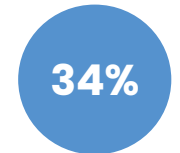
50% of the interviewees claimed they wash clothes at 30°C\*

### NO FULL LOADS



Of the interviewees claimed they don't wash a full load\*

### NO MIX MATERIALS



Of the interviewees claimed they don't like to mix the different materials\*

\* Data from the report by Electrolux called 'The Truth About Laundry', focused on Europe (2021)

# How to improve the process of washing clothes for people?

## DISTANT

People feel cold & distant when interacting with the washing machine, without associating any emotions

## MORE CARING

How might we transform the process to become interesting and involve emotions like caring?

## IMPATIENT

People want the laundry to be over as soon as possible and feel impatient while waiting

## TIME REDUCING

How might we reduce the duration of the washing process?

## UNPREDICTABLE

People can sometimes be saddened by the outcomes of washing. Damaged and color changed clothes sometimes are found.

## SAFE

How might we improve or transform the washing process to retain the quality and prolong the life of the clothes?



## What about the future?

There are many trends and forecasts about the lifestyle of people in the future. The analysis here is done for Europe, especially in relation to densely-populated cities in Europe such as Milan. By 2030, seven years from now, certain global events such as climate change and energy crisis would have altered certain behaviors and habits of people, and would also have changed their expectations from products and services.

### NEW URBAN



By 2030, 70% of the population will be living in cities.

### ENERGY POVERTY



In the near future the energy emergency will worsen dramatically

### ACCELERATION



Everyday lifestyle will become faster and more hectic with time

### ACCESS OR OWNERSHIP

People want more flexibility and freedom in their lives. They prefer to borrow or share rather than own.

### ON DEMAND

Time is precious. People want experiences that allow them to devote more time to themselves and their social lives & adventures.

### CONSCIOUS CUSTOMER

Faced with the global warming crisis, people are becoming more conscious of the ecological footprint of their daily tasks.

### CO-LIVING

People have their own private living space but have access to various communal facilities such as shared living and dining areas.



# The Scenario: Milan 2030



## Scenario

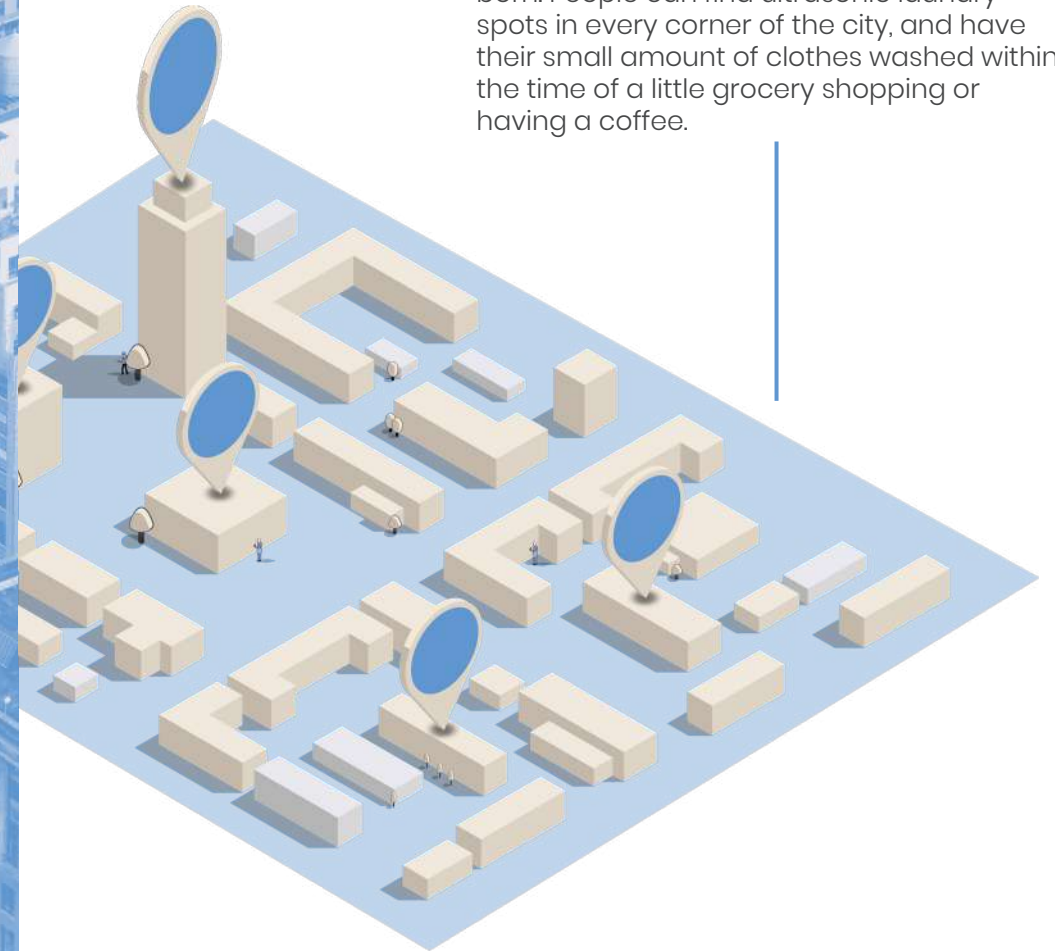
This scenario is based in the year 2030, eight years from now. Europe, just like the rest of the world, has been hit hard by the energy crisis. Densely populated cities like Milan in Europe are especially suffering from limited energy supply as well as exorbitant prices of electricity and gas. Moreover, climate change has been wreaking havoc around the globe, with unprecedented heat waves across Europe as well.

Hence, most of the citizens are now very conscious of the impact of climate change. The relatively younger population, from ages 15-35, is especially concerned with climate change and they try their best through their actions and choices to minimise their energy consumption and carbon footprint in order to do their part in saving the planet.

Governments and city municipalities also run many campaigns to make citizens conscious of their energy usage as well as about climate change and its drastic consequences. The municipalities also encourage (through incentives like reduced taxes and promotion through the municipalities' own platforms) new businesses and services which provide alternate solutions to citizens in order to overall lessen the energy consumption within households and commercial activities within the city.

## The Urban Washing Network

In this scenario, daily household chores are imagined in a different way. People are tired of the wasted time and energy expenditure related to washing clothes. Therefore, a new way of doing laundry is born. People can find ultrasonic laundry spots in every corner of the city, and have their small amount of clothes washed within the time of a little grocery shopping or having a coffee.



# Product

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Kièn

**A ULTRASONIC DEVICE  
TO SPREAD THROUGH  
THE CITY A NEW  
AFFORDABLE WAY  
OF CLEANING YOUR  
CLOTHES.**



## Target audience

### MEDIUM/LOW INCOME PEOPLE LIVING ALONE

For such individuals, often there is a need to wash only a few clothes. This need can arise because they may not own a lot of clothes, they may want to wash a few clothes of a specific colour or they may urgently need a particular type of clothing to be washed (e.g. sportswear, workwear etc.).

People who live with families or close friends have the opportunity to combine their clothes more efficiently for washing by running just full loads. But the ones living alone usually end up washing their few clothes by running a half empty load of a washing machine, which is both costly and resource intensive (energy + water).

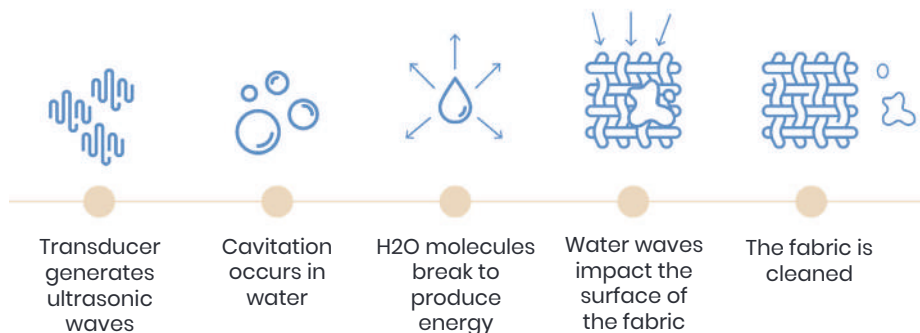
Hence, Klen devices can be used by people who have the need to wash between five to seven pieces of clothing. Such users can be out-of-town students or other people who live alone like some elderly, professionals or freelancers.



# Why Ultrasonic Cleaning?

## INTRODUCTION

Ultrasonic cleaning consists in the application of high-frequency waves in a liquid to enhance the removal of contaminants from the surfaces submerged. It has more recently been used in a growing number of applications involving chemical processes and surface conditioning.



## HOW IT WORKS

An ultrasonic cleaning system is made up of two components: an ultrasonic transducer and a high-frequency power supply, (generator). The ultrasonic transducer elements are attached to a diaphragm, which is arranged to come into contact with the liquid to be ultrasonically activated, converting an electrical signal to mechanical energy.

In non-elastic media such as water and most liquids, there is continuous transition of the wave as long as the amplitude of the sound wave is relatively low. As amplitude is increased, however, the magnitude of the negative pressure in the areas of rarefaction eventually becomes sufficient to cause the liquid to fracture, causing a phenomenon known as cavitation

As the wave fronts pass, the cavitation “bubbles” oscillate under the influence of positive pressure, eventually growing to an unstable size. Finally, the violent collapse of the cavitation “bubbles” results in implosions against the surface causing the dirt molecules to detach from it.

The frequencies used for ultrasonic cleaning normally range from 20 kHz to 80 kHz. This devices have a limited energy consumption which make them more resource efficient compared to other conventional washing technologies.

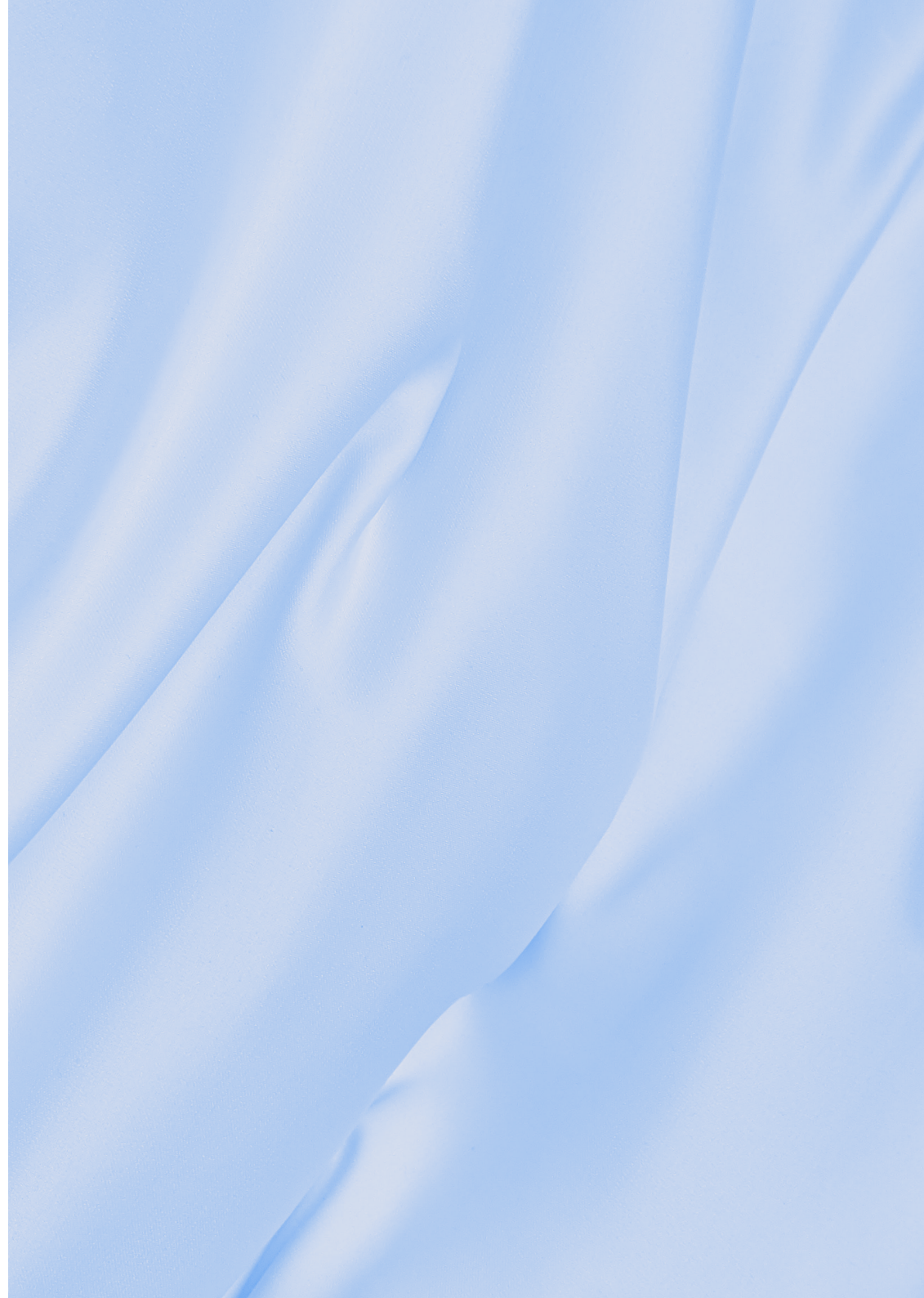
### APPLICATION ON TEXTILES

The application of ultrasonic technology to the washing of textiles has had limited research and exploration so far, but it is a worthy technology as it is a much better alternative to washing machines in terms of resource consumption. Considering the energy crisis in the world, this technology may become the focus of scientists and entrepreneurs in the near future.

Ultrasonic cleaning is not meant to be a substitute for conventional washing machines. Instead of using friction, it uses the cavitation process to clean fabrics. The ultrasonic washing prevents the spread of microplastics as compared to a conventional washing machine, as no friction is used.

However, since fabrics are not rigid materials, they need to be in close proximity to the transducers because the layers of fabric itself can often cause obstruction to the penetration of waves. Hence, this technology can be used with fewer clothes as with a large washing load a homogenous washing would not be achieved. That is why the ultrasonic technology works better for certain types of fabrics such as synthetics or delicates, as other types of fabric can be too densely woven for it. However, in the future the technology is forecasted to work better on all kinds of fabrics.

The cavitation process is able to achieve optimum sanitization of clothes even with medium temperatures of water (30-40°C), which is much lower compared to ordinary washing machines which often use a much higher water temperature, hence consuming more energy to warm the water. A small amount of detergent is still needed coupled with ultrasonic waves in order to achieve a maximum cleanliness of clothes in a small time.



## Introducing Klēn

Klēn is a unique device using a novel application of ultrasonic technology which offers a new way of cleaning clothes. It completely revolutionizes the way we wash and take care of our clothes.

- **ULTRA-FAST**
- **ENERGY SAVING**
- **ACCESSIBLE**
- **COMPACT**
- **EASY AND SAFE TO USE**
- **EASY TO REPAIR & MAINTAIN**
- **DURABLE FOR PUBLIC USE**



## Key features

### FUNCTIONAL SHAPE

The product mimics the shape of a donut because by placing the transducers at the centre the clothes can have the **maximum surface area exposed** to the ultrasonic waves when placed inside.

### TIME EFFICIENCY

Klĕn takes about **15 minutes** to wash **5-7 pieces** of clothes. As in a home, a person can do other chores while running the washing machine, similarly, the product locks itself enabling its users to multitask while they are in a public space.

### DIFFERENT PROGRAMS

Klĕn has **3 different programs** which can be chosen from the knob at the front of the Klĕn device. They include different washing settings based on the type of fabrics, which differ in **duration** and water **temperature**.

### LOW ENERGY CONSUMPTION

Considering the short usage time, Klĕn has an estimated energy consumption of just **80 W/load**. An average washing machine can typically consume anywhere between 400Wh to 2000Wh, with an average consumption of 1000W/load with a programme that lasts just 1 hour.





## Inspiration for the Form

Klĕn is far from being a traditional washing machine. It starts from the iconic circular shape traditionally recurrent in cloth-washing appliances and transforms it to give it a new meaning and adapt it to a new technology.

Circular forms are used for containing water everywhere in daily life. It is a functional form for holding water & washing as it is easy to clean and easy to manage.



# Main Components

## 1. FALSE WALL

Each device is wall-mounted on a modular empty panel which allows the wiring and the piping from the wall to be connected to all the devices without being visible.

## 2. OPENING

The lid has a frontal carved handle and a soft finish to make the opening easy and comfortable for the user.

## 3. TANK

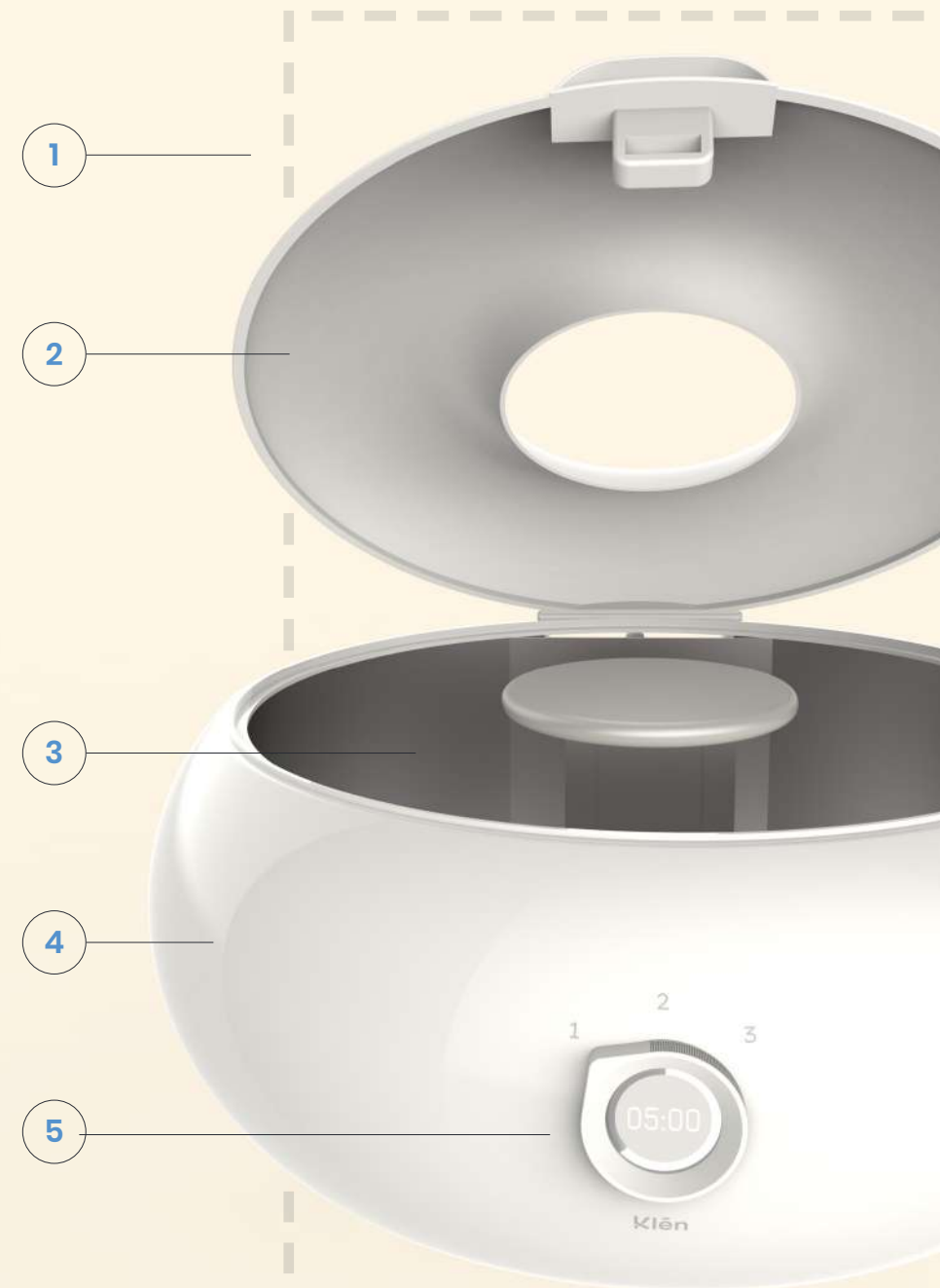
The tank is a separate component specifically for water to be filled in so that clothes can be washed. The transducer housing is placed in the centre of this tank.

## 4. OUTER BODY

All the internal components are enclosed in two outer shells that clasp together into a circular shape with the maximum diameter of 50cm.

## 5. INTERFACE

Through a simple rotating knob the user can easily select the program, start the device and have feedback on the washing time left.



# Materials

Klĕn device is developed with the design for disassembly principle in mind, hence no glue is used but just a minimal amount of screws.

Overall, the product is easy to disassemble for repair and maintenance or for salvaging

## BILL OF MATERIALS

- 1. Front shell
- 2. Back shell
- 3. Upper lid
- 4. Bottom lid
- 5. Transducer Lid
- 6. Knob

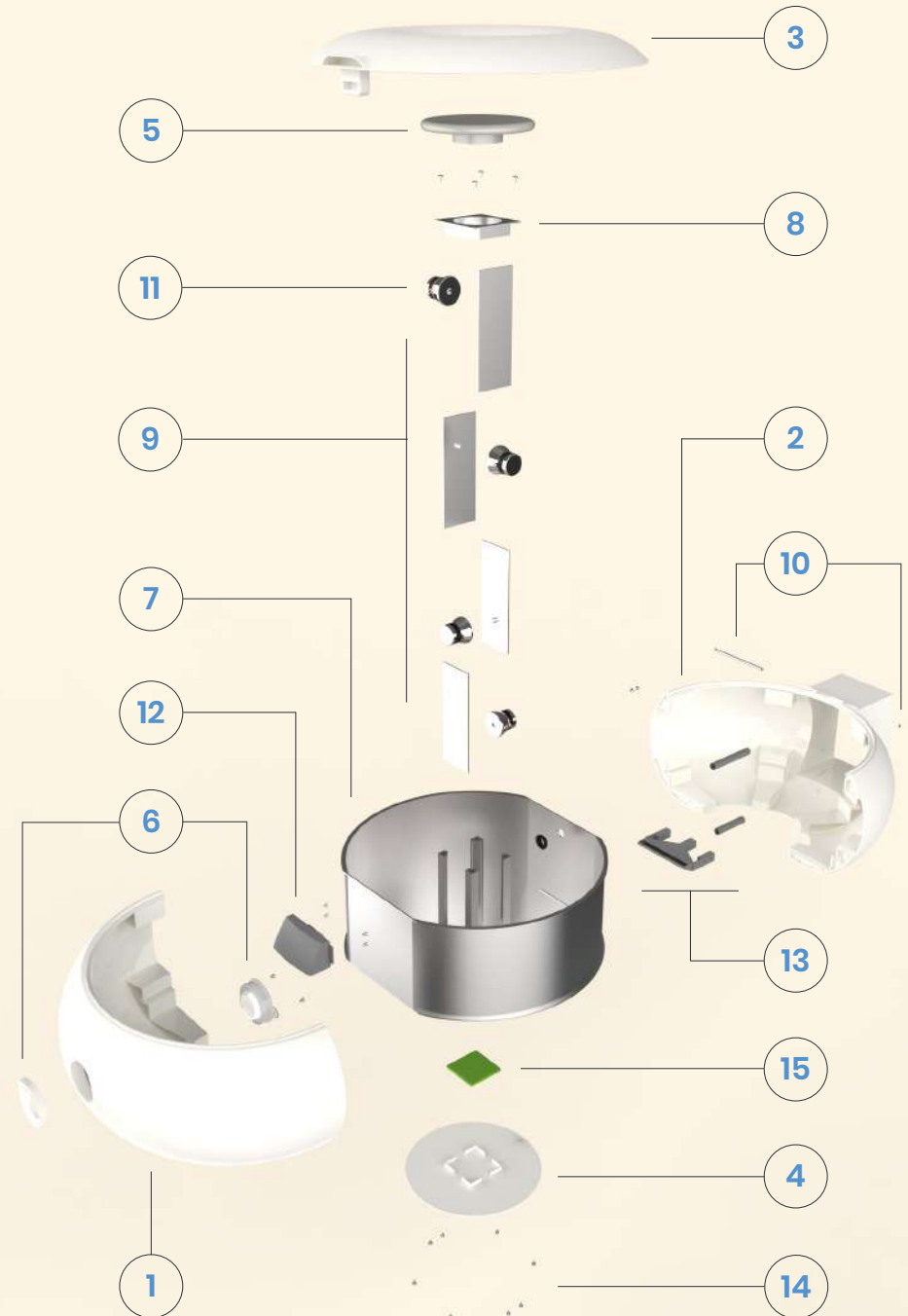
**ABS Plastic**  
(Acrylonitrile  
Butadiene Styrene)

- 7. Water Tank
- 8. Transducer lid fastener
- 9. Transducers housing
- 10. Hinge

**Stainless Steel**

- 11. 4 Transducers (40kHz)
- 12. Bluetooth lock
- 13. Piping,
- 14. Screws
- 15. Circuit and generator

**Standard market components**



## Composition in the space

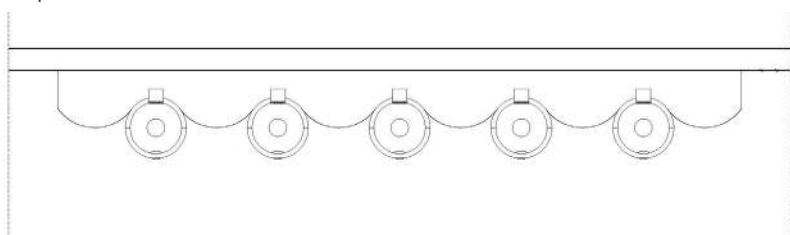
### CURVED WALL WITHOUT SHELVES

In the first variant the devices come with modular curved empty panels that recreate a wave shape. This curved false wall not only acts as an aesthetic component, which attracts the eye and provides visual flow, but also enables the Klen device to be easily attached to the existing wall of a store or shop. This variant is meant to be placed in public spaces where no shelves are needed because there are already some tables available or there's enough space to add some specifically for the service.

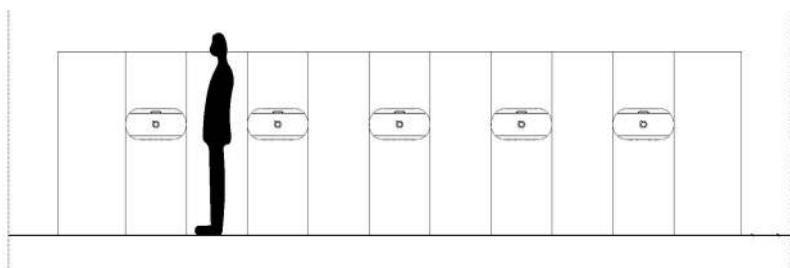
Materials:

Panels: ABS plastic

Top view



Front view



## Composition in the space

### PLAIN WALL WITH SHELVES

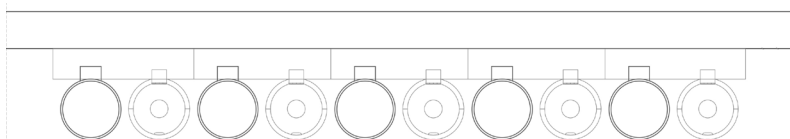
In the second variant the devices come with plain empty panels with a space for round shelves next to every machine. As with the curved wall, this false wall enables the product to be easily attached to the actual wall of a store or shop. The shelves enable users to keep, sort and even unfold/fold the clothes before or after washing and also serve an aesthetic purpose by providing visual flow for the eye. This variant is meant to be placed in public spaces where there aren't other plain surfaces available and there isn't enough space to add some except for the wall.

Materials:

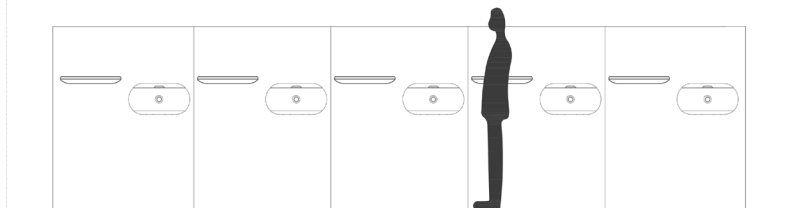
Panels: ABS plastic

Shelves: ABS plastic

Top view



Front view



# Prototype

## PHYSICAL MODEL 1:1 SCALE

The prototype has been made from wood, on a lathe machine. The pictures show how a user will interact with the device, and how they will add and remove clothes from the Klen device.



## Bag

### MEANT TO CARRY WET CLOTHES

The bag is aimed to transport the clean clothes safely to their drying spot. Since the clothes are not dry when the washing process in the Klen device ends, the user must take them home to dry them. For this trip, a rubber bag is offered to easily manage the wet clothes.

Inside the bag, there is a removable bottom layer made of a sponge material that absorbs the moisture from the clothes.

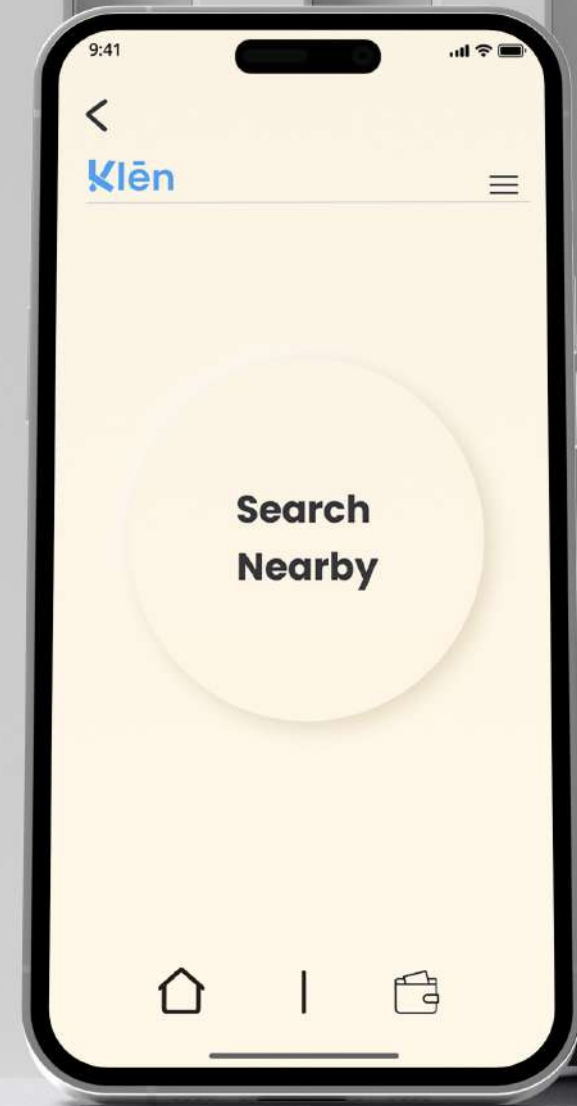
The bag will be offered to every user for free the first time they use Klen through a vending machine placed next to the Klen devices in a supermarket or or any other location. For later, the users can also purchase more bags through the vending machine if they like. As it is a reusable, water-resistant and durable bag, it is intended that users use it regularly, so as not to contribute to the contamination of the planet by using disposable plastic bags.



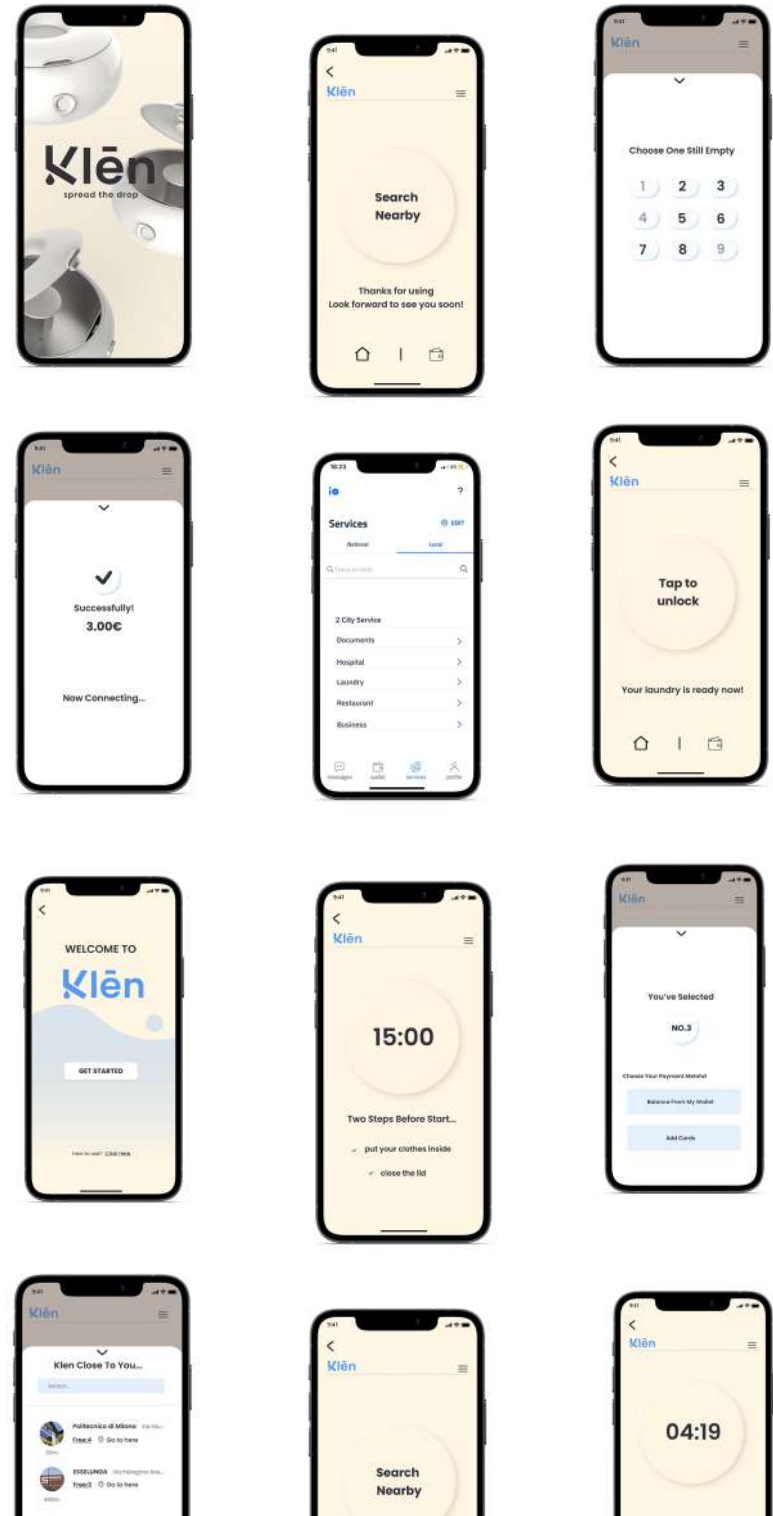
## Mobile App

### FEATURE INSIDE IO PUBLIC SERVICES APP

The app is a feature within the IO app that enables users to not only locate the places where the Klen devices are available, but also enables them to choose a device once they arrive at the location where they want to use Klen. They can choose the number of a device through their app, pay for using the service and also be able to get a notification once their device has finished washing their clothes. The device is also unlocked through the app once the clothes have been cleaned. This is so that no one else can steal or throw out the clothes while one user is using it.







# The Service

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## Service Description

### AIM

The aim of the service is to provide a new lifestyle for people living in cities. It achieves this through providing a fast and affordable network of laundry throughout the city.

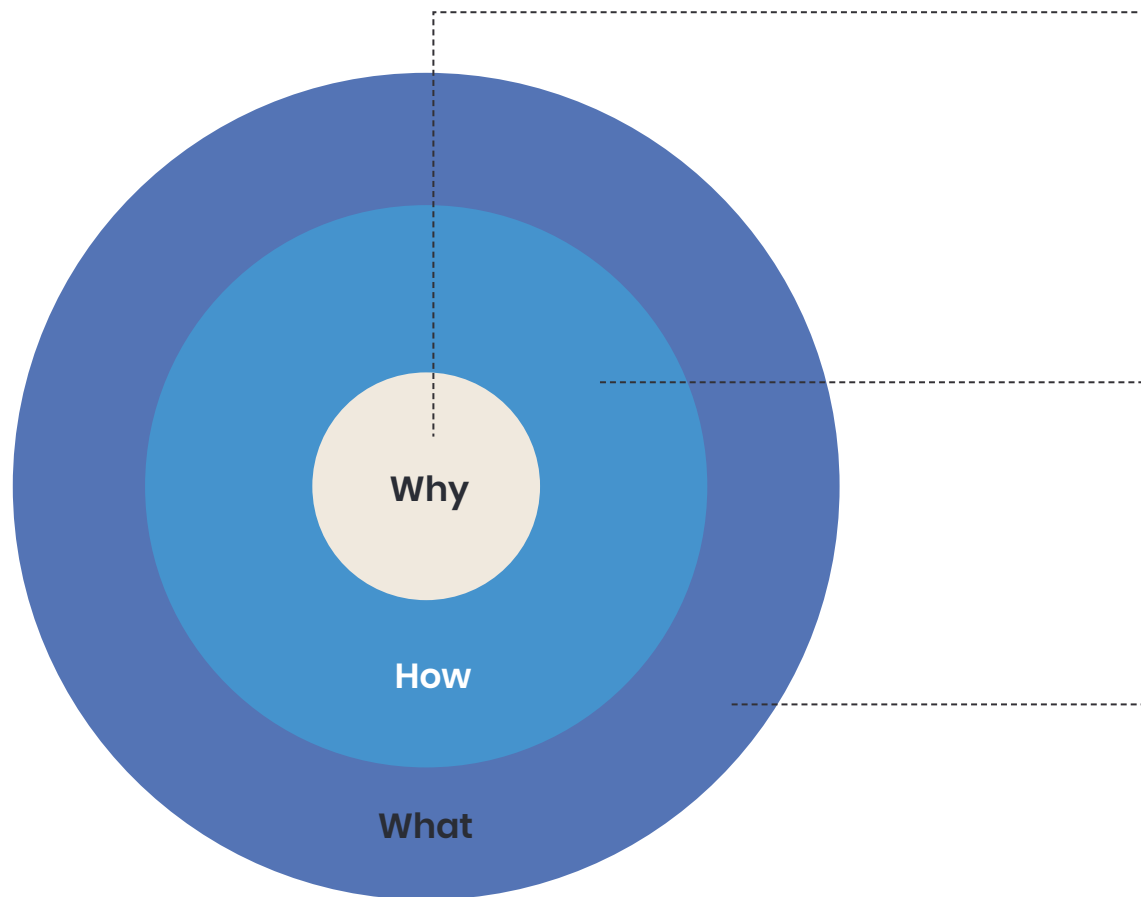
### TARGET

The main target for the Klen service is people who live alone in cities like Milan, including communities like students, single people, elderly people etc. They are often concerned about saving time and money.

### OFFERING

This service provides a unique and efficient laundry service which can be installed anywhere in the city: student dormitories, supermarkets or even in cafeterias. In this way, users can do multiple tasks at the same time. For businesses, there are multiple types of offerings, B2C and B2B2C which are detailed in the next few pages.

# The Golden Circle



## WHY

### What do we believe?

Klen exists because there are people who believe that the laundry process can become more effective and less time consuming. Klen also exists because there are people care about the future, and believe that the living environment of human beings can be changed by changing the current lifestyle.

## HOW

### What specific actions do we take?

By using the new ultrasonic washing technology, Klen collaborates with the government and public & social communities, for example, schools, supermarkets and cafeterias, to create a washing network to change the way of how people do the laundry.

## WHAT

### What's our result?

By building the urban washing network, Klen helps people to have a more energy and time efficient way to wash clothes. The ultrasonic technology helps save energy. By connecting the washing process with other facilities in the city, people are allowed to accomplish multiple tasks at the same time.

In the golden circle, why klen exists and how can Keln achieves goals are analyzed.

## Service Overview & Offering

The objective of the service is to provide a new lifestyle to inhabitants of large cities in Europe such as Milan, where the users can multi-task, save money, consume less energy and water, and also be able to take care of the planet. The service aims to achieve this by offering a connected system within the city where users can clean their clothes with ease.

The service offered by Klen is two fold, one is the Business to Customer (B2C) and the other is the Business to Business to Customer (B2B2C).

With the first kind, the B2C service, Klen will be leasing space from various businesses/institutions in Milan such as gyms or universities etc. Klen management will pay the respective business/ institute rent for the space they are renting. In such spaces, the Klen devices will be installed. Users will get to know about the service through various modes of marketing by the Klen team such as social media, notifications on the IO app, billboards etc. Then, the users would use the feature within the IO app to locate a business/institute nearby where the Klen service is present. They would go to the location they have identified and would use the Klen device there.

### TO OTHER BUSINESSES

### TO THE FINAL USER

**B2C** Renting out their unused empty space

**B2B2C** Transportation & installation of the product

Repair & maintenance of the product

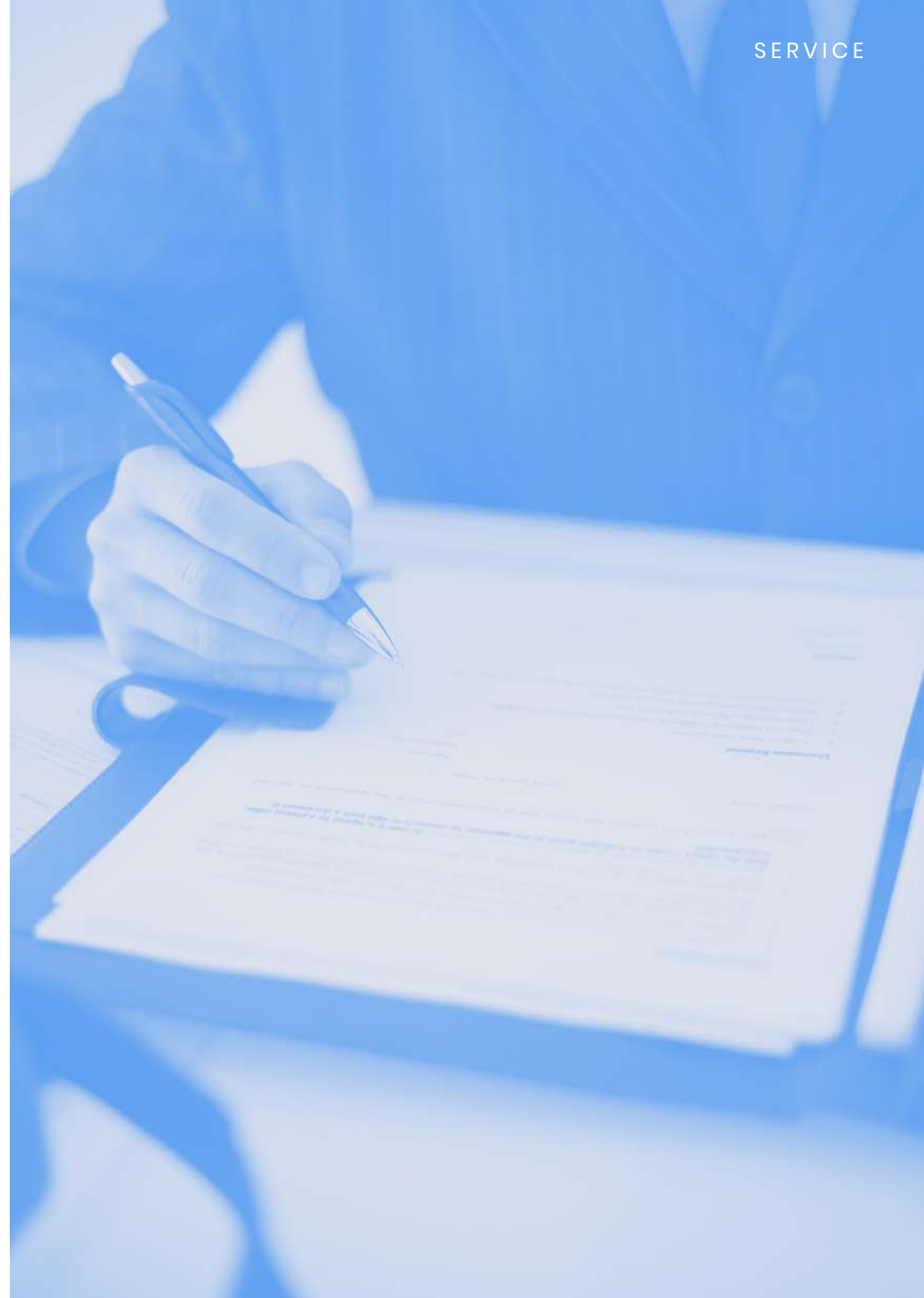
Customisation of color and branding based on the need of the business

Trade-in or exchange of the product when it is not working properly or at the end of its life

An affordable, swift & energy saving method of washing clothes

A new feature on IO app where they can discover the locations of Klen and pay for using it

With the B2B2C service, a white-label product-service would be in-place. This means that a business would purchase the Klen products and install them at their store/shop/outlet. However, the Klen management would still be responsible for the maintenance and repair of the device, and would also offer discounted trade-in for a new Klen device when any of the already bought devices reaches its end of life. In this version, Klen would not be marketing the product. The business who bought the devices would brand and market the product under their own brand's umbrella. Although, Klen would help the business customise the layout and placement of the Klen devices, wall panels and shelves according to the available space and as per the needs of the business who has purchased these devices.



## Stakeholder Map

The stakeholder map describes the various stakeholders who are directly or indirectly involved in the Product Service System of Klen.

Although Klen can be used by anyone, its main users will be students, people who live alone, and the elderly; hence they are all the primary stakeholders. The other primary stakeholders include the management of the io app, as well as people who are running or managing various businesses or institutions in the city. The last primary stakeholders are the supportive services that the Klen team will hire, such as manufacturing partners or delivery partners.

The secondary stakeholders include all the general users of the Klen service, as well as comune di Milano and the energy & water supply companies.

The tertiary stakeholders comprise of society and all the residents of a city, as well as media, designers and climate change companies.





# Leo, 26

Male, 26 years old.  
Currently studying at university  
in Milano and living alone.

## Personas

**“I wish there was a sustainable way to live, for me and for the planet.”**

## Bio

Leo is a university student at PoliMi who originally belongs from Rome. He currently rents an apartment in Milan and lives on his own. Due to his busy schedule in the university, he doesn't have too much time to do the household chores and he has a limited budget as a student. Moreover, he is a climate activist and feels strongly about climate change and energy crisis happening during the recent years.

|                |   |   |   |
|----------------|---|---|---|
| Time           | ● | ○ | ○ |
| Money          | ● | ● | ○ |
| Tech-savviness | ● | ● | ● |

## Needs

Saving money and time  
Sustainable lifestyle  
Be able to do multiple jobs at the same time

## Painpoints

Limited Budget  
Very busy schedule  
Feels guilty when using too much electricity for small tasks

# Claudia, 60

Female, 60 years old.  
Retired and living alone in Milano

## Personas

**“I wish I could spend more time outside with the world.”**

## Bio

Ruth is a retired woman and lives alone in the apartment which she has been staying for the past 20 years. Her kids moved out and her husband passed away a couple of years ago. To avoid feeling lonely, she recently started going to a café near her house to chat with others but she feels she has to be back home early for doing household chores. Ruth is also concerned with the money she is spending on bills and tries to spend less. She is also interested in learning about new technologies so that she can talk to her grand-children about it.

|                |   |   |   |
|----------------|---|---|---|
| Time           | ● | ● | ● |
| Money          | ● | ● | ○ |
| Tech-savviness | ● | ○ | ○ |

## Needs

- Better time management
- Better money management
- More time for relaxing
- To be in touch with new tech

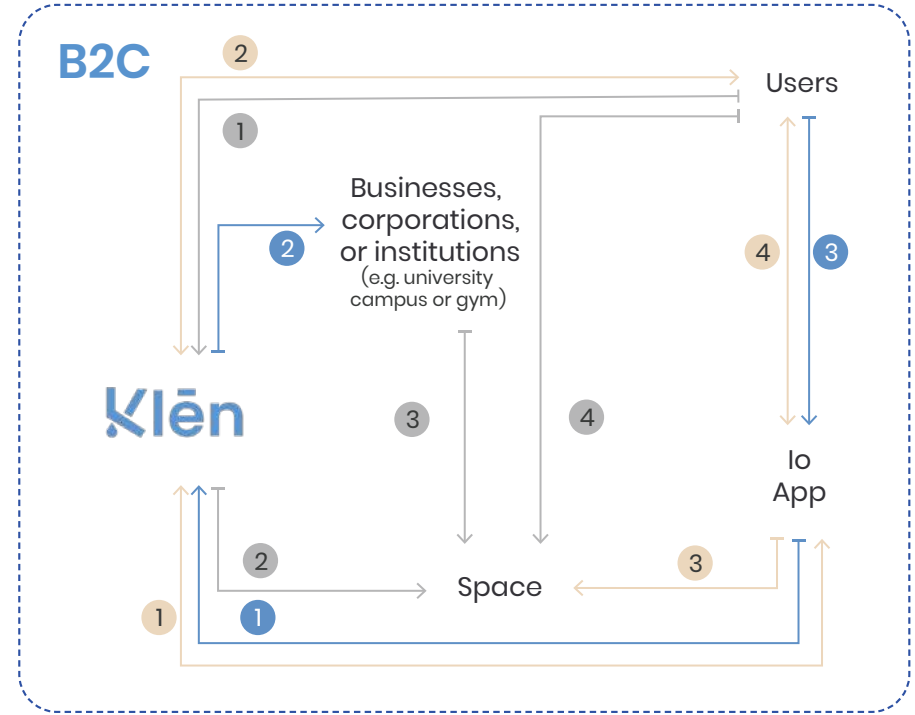
## Painpoints

- Worried about spending money
- Spending too much time on household chores
- Limited agility due to age



# System map B2C

The map describes the flow of information, finances and general interactions between various actors in the proposed B2C product service system of Klen. The connections are shown between Klen, businesses, the IO App, and the final users.



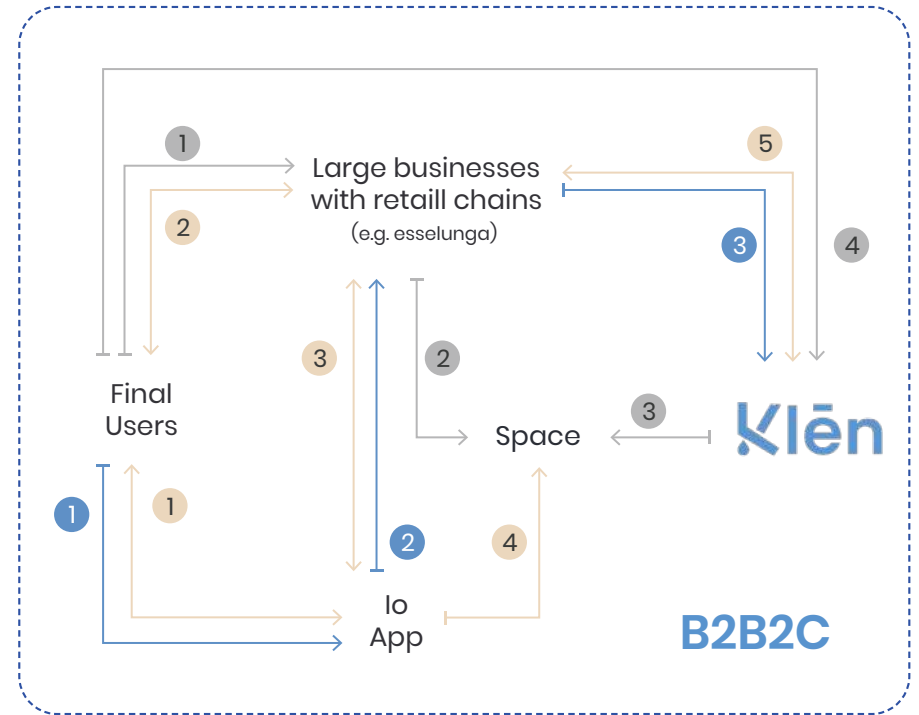
## KEY

- Financial flow —
- Information flow —
- General actions —

- |  |   |  |
|--|---|--|
| <ul style="list-style-type: none"> <li>1 earning from user's payments (after keeping its own cut)</li> <li>2 pay rent</li> <li>3 pay for using Klen through</li> </ul> | <ul style="list-style-type: none"> <li>1 exchange of information through direct communication</li> <li>2 info &amp; feedback through social media/website</li> <li>3 provides location of the locations of the machines</li> <li>4 provision &amp; exchange of info through the IO app</li> </ul> | <ul style="list-style-type: none"> <li>1 use Klen</li> <li>2 installation &amp; maintenance of the Klen devices</li> <li>3 provide the</li> <li>4 come to the</li> </ul> |
|--|---|--|

# System map B2B2C

The map describes the flow of information, finances and general interactions between various actors in the proposed B2B2C product service system of Klen. The connections are shown between Klen, businesses, the IO App, and the final users.



## KEY

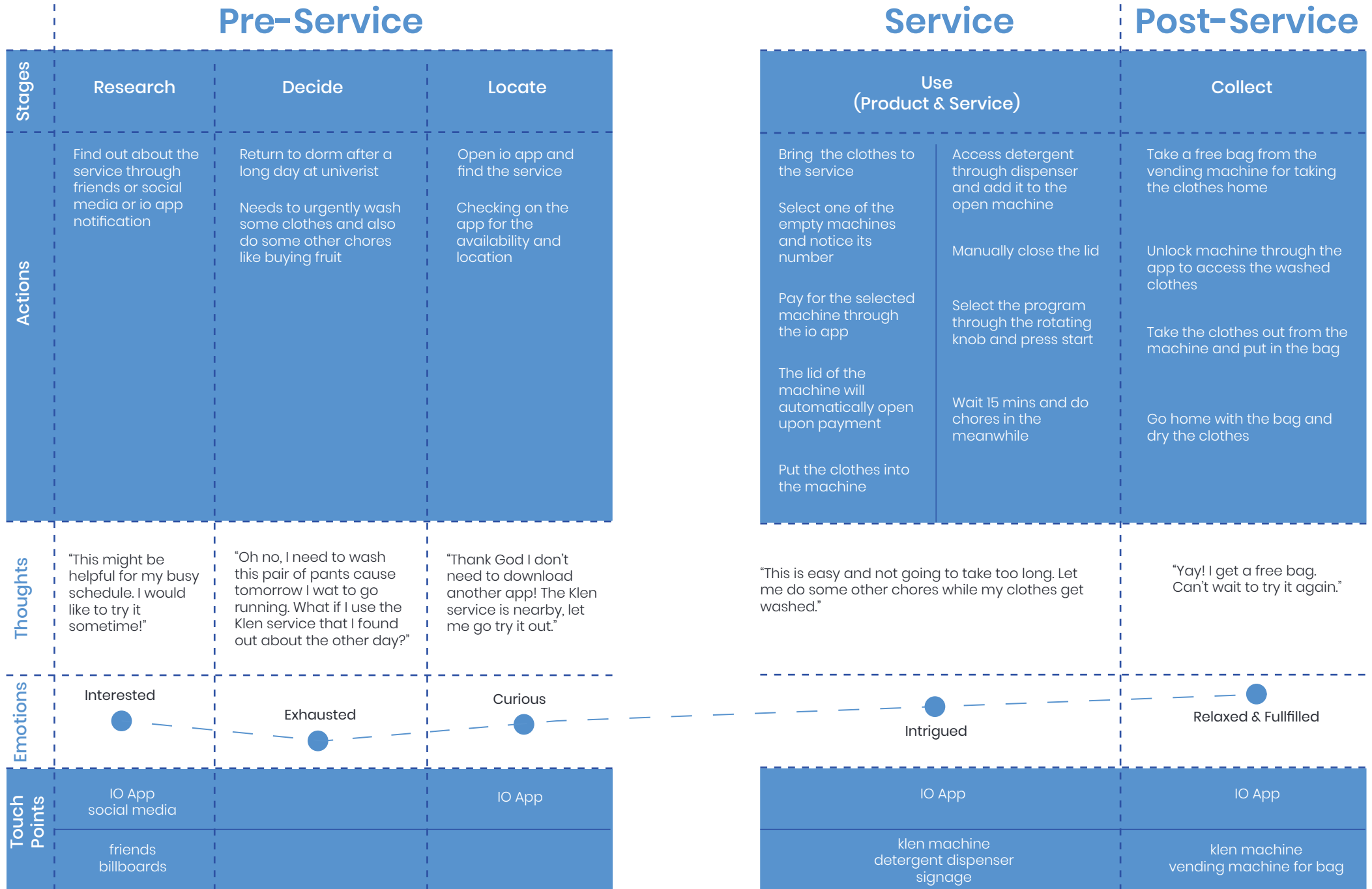
- Financial flow
- Information flow
- General actions

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li><b>1</b> Payment for the product and the maintenance of the service</li> <li><b>2</b> Earning from user's payments (after keeping its own cut)</li> <li><b>3</b> Payment for the product and the maintenance of the service</li> </ul> | <ul style="list-style-type: none"> <li><b>1</b> Provision &amp; exchange of info through the IO app</li> <li><b>2</b> Direct exchange of of feedback through social media or website</li> <li><b>3</b> Exchange of info's through direct communication</li> <li><b>4</b> Provides location of the</li> <li><b>5</b> Info &amp; feedback through direct communication &amp; social media/website</li> </ul> | <ul style="list-style-type: none"> <li><b>1</b> Come to</li> <li><b>2</b> Owns</li> <li><b>3</b> Installation &amp; maintenance of the devices</li> <li><b>4</b> Use Klen</li> </ul> |
|---|--|--|



## User Journey Map

This journey map describes how a student living in Milan will interact with the Klen service and products for the first time. The journey map is displayed on the next two pages. It is based on the persona Leo that was described earlier in the Personas section. The map starts from when Leo discovers Klen and feels the need to use Klen, and describes his whole journey till he gets back home with his clothes washed.



# Business Onboarding Storyboards

The storyboards explain in detail how Klen will interact and onboard other businesses in both the B2B2C and B2C version of the service. The relationship with other businesses/ organizations/ institutions in the city is of utmost importance for Klen as Klen devices would be installed in spaces owned by these businesses.

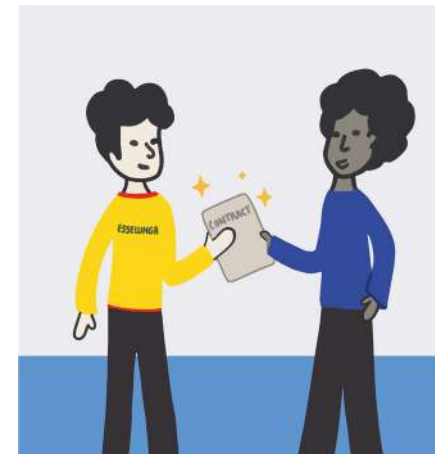
## B2B2C



**Pitch**  
The operations team of Klen go to Comune di Milano to pitch the idea



**Agreement**  
Comune di Milano offers incentives to businesses to install Klen



**Agreement**  
Esselunga agrees to buy Klen as a white label product and service



**Agreement**  
Esselunga pays Klen the cost of the products and the monthly cost of maintenance and repair

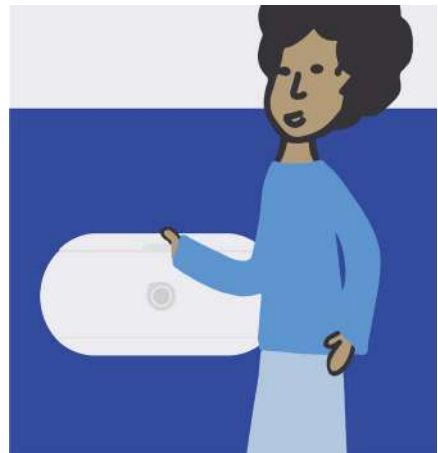


**Agreement**  
The KlĒn team communicate with Esselunga for the customised design

**Installation**  
KlĒn team install the products in Esselunga stores

**Post Installation**  
KlĒn team does the monthly checking and maintenance

**Post Installation**  
KlĒn changes and places a new product for less cost when the previous product stops working (trade-in service)



**Post Installation**  
Esselunga markets the products to their own customers

**Post Installation**  
Customers start using the product

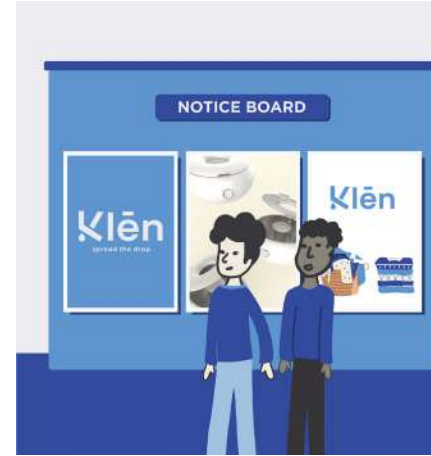
# B2B



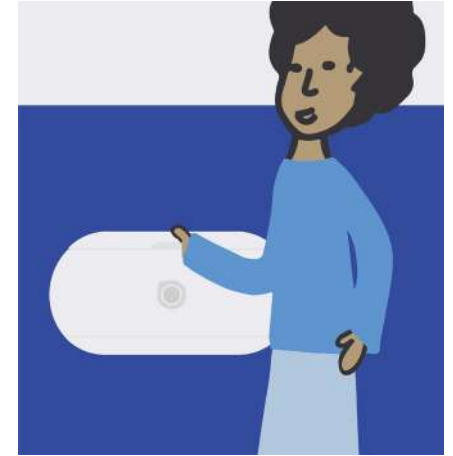
**Pitch**  
The operation team of Klen go to Polimi to pitch the idea



**Decision**  
Polimi agrees to rent the space and signs a contract with Klen



**Pre Installation**  
Marketing team promotes the product to the customers



**Post Installation**  
Customers start using the product



**Decision**  
Klen pays the first six months of rent to Polimi



**Pre Installation**  
Team installs the products in Polimi



**Post Installation**  
Klen team does the monthly maintenance and pay the rent to Polimi



**Post Installation**  
Klen places new products when the previous ones stop working

# Visual identity

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## Who we are

Klen was created to propose a new vision with respect to the canonical roles related to household chores and revolutionizing the world of laundry. Thanks to studies related to ultrasonic technology, it has been possible to create a product that allows each person to wash their clothes in a sustainable and economical way, taking care of the environment, fabrics, and their own bodies. Klen is not just a product-service but stands as a new possibility to reduce the exploitation of energy and environmental resources, and increase people's awareness and sociality by reversing the course.

**“If I have seen further it is by standing on the shoulders of giants.”**

Sir Isaac Newton



## Vision and Mission

### VISION

Looking at the world and the reality around us, we realized how necessary it is to live in clean world, in order to have a clean mind and a clean body for ourselves and to leave others.

### MISSION

We live in a world that is undergoing profound transformations, social, cultural and especially environmental. Science helps us to seek a clearer picture of the world in this relentless search for truth. Thanks to it and the advent of technology, which has radically changed our lives, we want to take care of what we hold most dear: the well-being of the planet and all animals, including humans. Our mission are enable anyone and anywhere to be able to take care of themselves by washing their clothes in an environmentally and material friendly way.





# Be the change you want to see in the world

## Our values

Our brand values are not values. They are concrete actions that we carry out to go in a specific direction, that of change. A change that comes from within, from each person, and it comes today.

### SUSTAINABILITY

Energy sustainability is our first value; we believe in a zero-impact world, and we strive to make this possible through our products.

### SIMPLICITY

The simplicity of our products and service allows any user to approach, from the youngest to the oldest. So that everyone has the opportunity to take care of themselves.

### SOCIALIZATION

Collaboration is what allows Klen to exist and allows people to get to know each other, help each other and socialize in our small community.

# We are authentic and down-to-earth

## Our tone of voice

We want to tell the truth of the facts, and we want to do it in a simple way so that everyone can understand.

We are respectful but not serious; we are authentic and transparent.

### CARING

We talk to people, trying to reassure them and help them to always make the best choice.

### AUTHENTIC

We believe in the value of authenticity and try to uphold it in everything we do.

### INSPIRATIONAL

Our language is aimed at inspiring people so that they can initiate change.

### OPTIMISTIC

We want to be positive and hopeful, not use negative language that holds people back but always try to be proactive

**Klēn**  
 spread the drop

**NAMING**

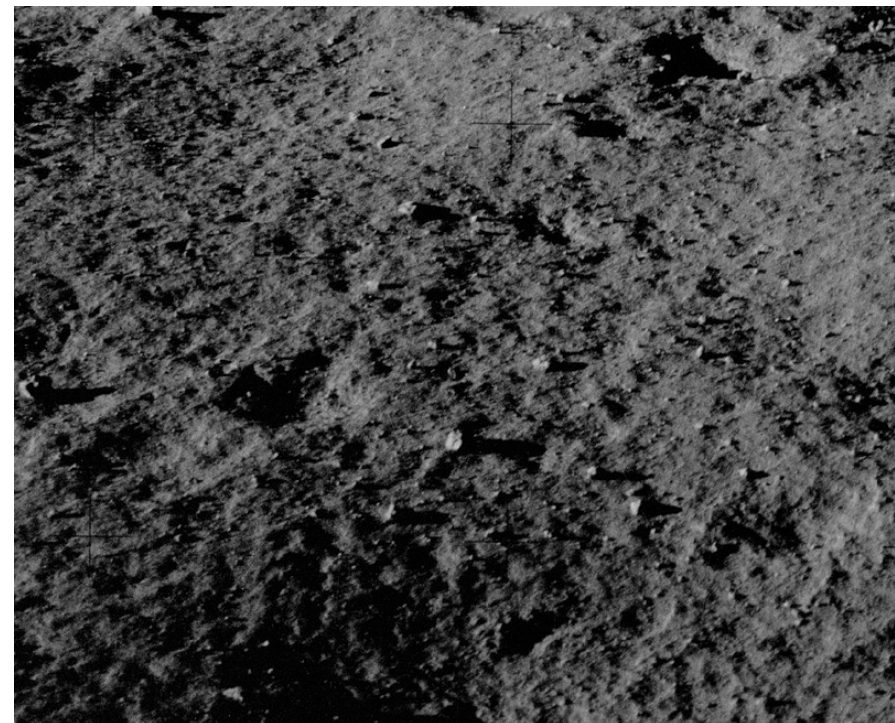
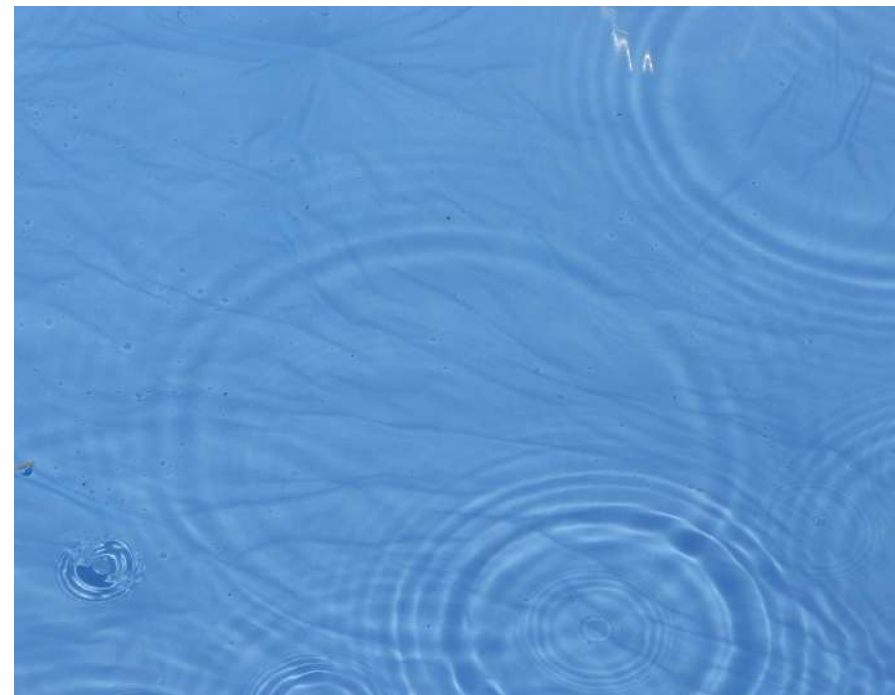
Our name recalls the phoneme of the word “clean.” For us Klēn does not simply mean clean, so free from dirt, marks, or stains. To clean one’s mind from negative thoughts, to clean one’s space, to make order in and around oneself. This is Klēn.

**SLOGAN**

Participating in Klēn means participating in a movement made up of many small droplets changing their habits in order to live in a more sustainable world.

## Color Palette

Our palette consists of only two colors: a deep blue and a dark gray. The first color is reminiscent of water, not the deep sea, but the color of a sky when the weather is good that is reflected in a lake. The second color on the other hand is still related to immensity but in another way, in fact we were inspired by the colors of the lunar surface.



## Typeface

We are using a sans serif typeface because it is modern and friendly. Poppins typeface for the body text in two different variants (Light and Semibold).

For the logo of the brand we chose the font BD Supper, designed by the Swiss graphic design studio "Buro Destruct".

Poppins  
Light

Abcde

Poppins  
Semibold

Abcde

BD Supper  
Regular

Abcde

# Moodboard

We created a moodboard that takes its cues from the colors of the moon and space, as well as the softness of fabrics and the smell of clean. Our shapes are rounded, recalling the aesthetic of 1960s products but re-proposing it with a modern design.



## Campaign

Our tagline: "Spread the drop" is also the payoff that becomes an integral part of our campaign. Spread is a strong call to action because it pushes people to action, that is, to share their values through concrete gestures, like what we are inviting people to do.





## Physical Campaign

Our advertising campaign is placed in the city of Milan, from about mid-January until mid-February. We chose this period because the year starts again with good resolutions and good habits (such as going to the gym or starting the year with a good challenge like Veganuary).

Our posters will be hung around the city of Milan, in passing places but especially inside all those places that have joined Klen, (such as gyms, supermarkets, universities...), to make people curious and ask for more information about the kind of service we are offering.



## Bibliography

Electrolux. (2021). (rep.). The Truth About Laundry: Findings of a European study into laundry, caring for clothes and environmental impacts.

Fuchs, F. J. (2015). Ultrasonic cleaning and washing of surfaces. *Power Ultrasonics*, 577–609. <https://doi.org/10.1016/b978-1-78242-028-6.00019-3>

Sethi, S. (n.d.). Physico-chemical processes of conventional soil release vis-a-vis ultrasonic cleaning of textiles. *International Journal of Research and Analytical Reviews (IJRAR)*, 2(4). E ISSN 2348 -1269, PRINT ISSN 2349-5138

Wang, W., Zhou, Q., Long, H., Zhang, Y., Rather, L. J., & Li, Q. (2021). A study on optimization of irradiation frequency for ultrasonic laundry of textile. *Fibers and Polymers*, 22(5), 1482–1489. <https://doi.org/10.1007/s12221-021-0573-1>

Xu, X., Yao, X., Jiang, K., Zhou, Y., Lu, W., Jiang, W., & Wang, X. (2022). Novel ultrasonic-assisted cleaner technology for cocoon brushing at low temperature. *Journal of Cleaner Production*, 359, 132070. <https://doi.org/10.1016/j.jclepro.2022.132070>



EVOLVING  
for shared system