



CARe

## Problem:

43

*Babies died in 2017 because of parents' forgetfulness (increasing trend)*

## Customers:



*Parents who have at least one car and a baby child that has less than 4 years old*

## Solution:



*It is a device able to alert parents through messages and calls if they forget the baby in the car*

*Value Proposition: Prevent babies' deaths by developing a reliable, cheap and easy-to-use device in a way that every parent can use it*

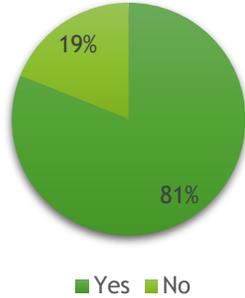
## Market and Opportunities

Total family's expenses for a new born: average **10784,4 €** per family per year

**CarE is 1% of total expenses**

**57,5 %** of customers buy baby equipment online

**81 %** Customers would buy CarE



Recent increase of awareness among customers

\*based on 106 answers

## Revenues streams

Sales directly from CarE website



Sales from CarE account on Amazon

**Breakeven point (units): after 191 products sold**



## Stakeholders contacted and interested

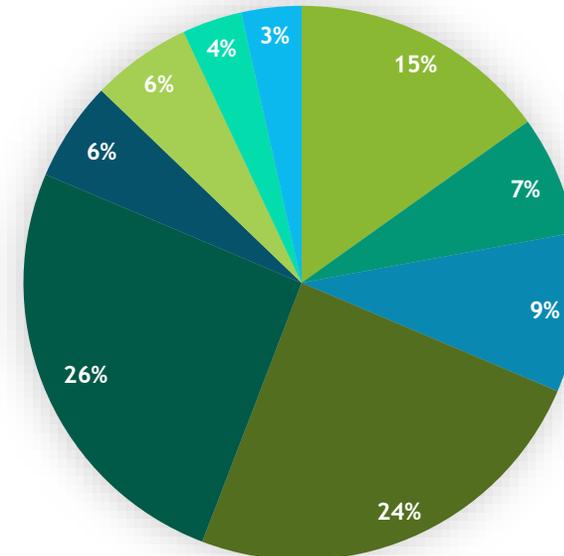
Associations (baby related) in Trento



Retailers (baby equipment) in Trento



## Customers' willingness to pay CarE



**CarE Price (per unit): 99€**

**CarE Cost (per unit): 64,97€**

\*based on 106 answers

## Functionalities:

The product will be placed on the driver seat. To do that first you need to plug the 2 cables on the iron of the head seat. Second, you have to insert the batteries. Now make sure that sensors are right positioned and there is not objection between sensors and the baby. A red led will inform you if the baby is detected. Then you will control the driver sensor and make sure that when the driver is in position the yellow led will blink\*. After this, when you're ready to start the travel, push the blue button in the upper part of the product and the system will start to guarantee your baby's safety!

## How it works

The system is based on a double control with the 2 PIR sensor that are directly linked to the presence of the driver and the baby. The event of having the baby in the car and not the parent will trigger a 4 minutes\* delay and another control. If the control of having a baby and not the driver is true for the second time the GSM will send a call\* to the first phone number. Then the system will pause for 2 or 4 minutes, depending on the temperature on the car. Then a SMS will be sent. After 2 minutes delay, the system re-evaluate the condition and will re-do all the action to a second number. The only thing that can stop the alert is to take the baby off

- Arduino
- GSM Module
- 2 AA Battery Packs
- 3 Leds
- 2 PIR sensor
- 1 Button switch

\*time and installation process validated with customers in parking with trials

### Front/lateral



### Back/lateral





Marta Franzoni,  
Main student,  
*Market advisor*

Oleksandra  
Luchsheva,  
Software  
engineering

Davide Silvestri  
Telecommunication  
Engineering  
*Software developer*

Fabio Silvestri  
Telecommunication  
Engineering  
*Hardware developer*

Nguyen Quynh Anh,  
Main student,  
*Financial advisor*

Matteo Favilli,  
Main student,  
*Business advisor*

Sridhar  
Venugopal,  
Security & privacy  
student,  
*Developer*