## perfectDN

The perfect natural dryer

## Who is it for?

- The final client
  - Inhabitants of the World without dryer machines or don't trust in them.
- The intermediaries
  - No intermediaries (mobile phone app)
  - Dryer rack producers
  - Home appliance companies (GE, LG, Samsumg, Philips)
  - Tech and Home automation companies (Amazon, Google, Apple)

## What problem does it solve?

- It solves the big problems that people is suffering in the cities when leaving clothes outside to dry:
  - Bad smell after a long exposure in city's air.
  - Not knowing the optimal moment to wash the clothes and pick up then afterwards.

### **How it works?**

- The product have sensors to measure temperature, pressure, humidity, quality of air and light.
- It has to be trained in order to know when the clothes are dry and when the clothes are stinky.
- It has to be connected to external sources that give the forecast of temperature, humidity, % of sun and quality of air during a day.
- Then, it predicts the time it will take to the clothes to dry and to get stinky starting at different moments of the day given the conditions they will have. It outputs the best moments (best margins between stink time and dry time).
- Finally, once the clothes are dry it sends a message and a reminder some time before the clothes get stinky.

## Why might it fail?

- Bad implementation
- Incorrect measurements / sensors
- Demanding user interface
- No bargaining power
- No partner agreements
- Cost structure

# What should we prototype and test?

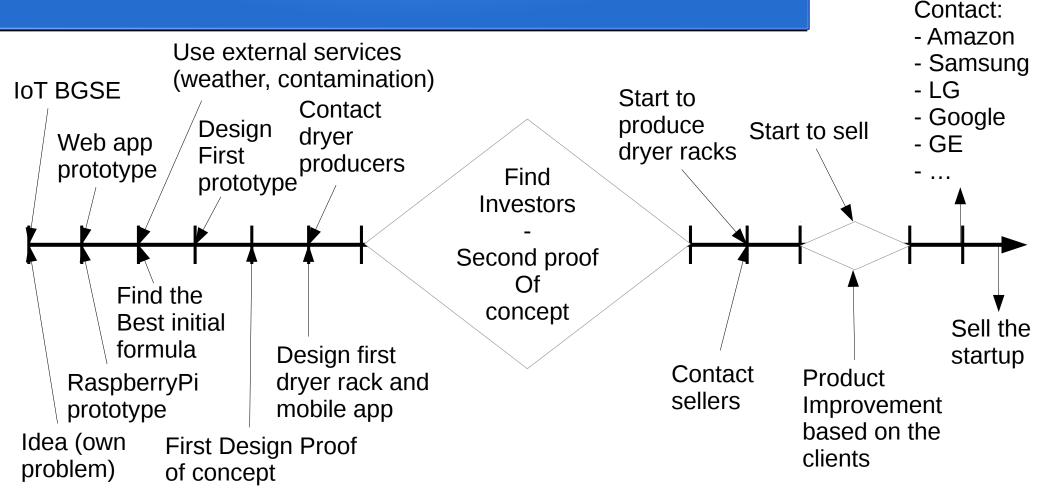
### Prototype:

- Capture information about weather, humidity, contamination, clothes conditions.
- Install sensors required in available dryer racks
- Evaluate clothes properties and behavior during the drying process.
- Design Mobile app.
- Design and production of the smart perfectND.

#### Test:

- Analyze information captured from sensors.
- Client satisfaction.
- Mobile app AB testing.
- Supervision and very little survey to the final client.

## How will we make this happen?



## What did we do?

- We created a MVP that approximates the time it takes to dry the clothes based on temperature and humidity and the time it takes to the clothes to be smelly based on pressure.
- It collects sensor data of temperature, humidity and pressure and once the threshold of dryness is reached it sends a signal to the client with the approximate time before the clothes get stinky.
- If the client does not pick up the clothes before the clothes reach the threshold of stinkiness it sends another message recommending to wash the clothes again.
- Once the session is finished it sends the data to Azure cloud so it can be used to improve later performance of the algorithm.