Master of Science in Product and Service Design

Lab of Smart Objects
Open Design module, 3 CFU

A.Y. 2020-2021 – 1st semester - 1st year
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SAPIENZA
Università di Roma

Schedule - subdraft
Subdraft 1st delivery

Date	Description
5/10/2020	Introduction and Description first Assignment
12/10/2020	Lesson - Primary/Secondary Functions of Products. Application of Primary/Secondary Functions of Products
19/10/2020	**Lesson - Personas, Customer Journeys and StoryBoard -PART1. Application of Personas, Customer Journeys**
26/10/2020	Workshop
2/11/2020	1st Project Delivery

What we have done
Competences acquired so far

Now you can specify:

1. potentials of interaction
2. primary/secondary functions

We need to know the personas we will design for, to identify their needs in hierarchies, and propose design solutions.

"A brilliant solution to the wrong problem can be worse than no solution at all: solve the correct problem."

Donald A. Norman, The Design of Everyday Things

Solving the correct problem

An actual workflow could be:

- acquire data on the user's habits (ethnographic research etc.);
- transform the data into "something" that can generate empathy among the designers and the user: this tool is named **Personas**;
- make the whole design team able to read clearly and immediately data on user habits: we use the tool named **Customer Journeys**;
- outline Primary and Secondary functions;
- begin the creative phase of DESIGN (very personal phase in which the designer's personality emerges).

Route summary
What we have done, what we will do

In this assignment, however, we proceed in a different order for didactic reasons.

To stimulate the search for solutions, we have given ourselves the constraint of the cylindrical shape. In it, you have highlighted the potential for interaction based on the characteristics you gave it: weight, material, size, texture, etc. and you have foreseen the types of sensors you might use.

Activity #1
What we do today

Among those already found, now choose the potentials of interaction that you consider more immersive/enthralling and imagine in which situations they could be useful/enhanced.

Sketch your idea, making the sketching communicate the idea without the need to add too much oral explanation.

Example
My cylinder

My cylinder is made of soft material, it can be held in one hand, it can be crushed with one hand, it deforms proportionally, it can slowly return to its initial shape when the mechanical stress stops acting.

Using a pressure sensor, and a series of LEDs, the cylinder changes color based on how much force is applied by the user.

What can it become? A product for the physical rehabilitation of the hand, which communicate the users how much pressure they are applying with a color code - red high pressure, green medium pressure, blue low pressure. I have, therefore, identified the **Primary function** (what my product does).

End of the first part

From Primary function to Secondary functions

How can we define Secondary functions of the product? We have to define the Personas that will use our product, and their "Journey" with it, from when the need of the product arises until the moment the user stops interacting with it.

For example, the person who uses the product is named... needs to do rehabilitation at home, 3 times a week …, lives in a small apartment …

Defining Personas

There are several free models to sketch Personas.

Defining Personas

Customer Journey
Customer Journey map

A Customer Journey map illustrates the steps the customers do with our product (or service), from when the need arises until it stops, and so the users stop interacting with our product (or service).

Customer Journey – example
Applied to the previous example

The Journey begins with the need to do physiotherapy for 1 hour a day. The user takes the product from the cabinet. He hangs it around his neck (or a different solution to be free to move) with a shoulder strap. The user does therapy and uses the product while doing something else - watching TV, talking on the phone, eating. He checks its watch from time to time to see how much time has passed. Finally, he removes the product and puts it away.

Customer Journey – example
Applied to the previous example

What do we learn from the Journey? We could insert a sound timer to prevent the user from checking the time, we could make chromatic feedback fun to overcome boredom, we could insert motion sensors and transform the cylinder into a sound instrument that emits sounds based on how it is moved … and the user can turn it into maracas … we could make the feedback less invasive so that the user can do other things during the therapy without being distracted, etc.

In summary

- Identify the potentials for interaction that you find most stimulating and imagine in what situations they might be useful. What can it become? A product for …
- Define the Personas who will use the product
- Design the Journey map that the user will do
- What do I learn from the journey map?
  - the context,
  - the activities that the user does.
- Define secondary functions, eventually DESIGN!

Have fun !