

DESIGN FOR CUSTOMER ENGAGEMENT IN THE TRANSITION TO A CIRCULAR ECONOMY

A case study in Senseo coffee machines

DESIGN TOPIC

Philips is now committed to accelerate in the transition to a circular economy. However, companies cannot shift to a circular economy alone: consumers are crucial in the success. Therefore, the goal of the project is to activate consumers to engage in the circular economy with a case study in Senseo coffee machines. Senseo users can show circular behavior by taking good care of the product and by repairing it when it is malfunctioning, for extending the product's lifetime. At the end-of-life of the product, the user can contribute by disposing the product at proper recycling points in order for the materials to be reused.

PROBLEM DEFINITION

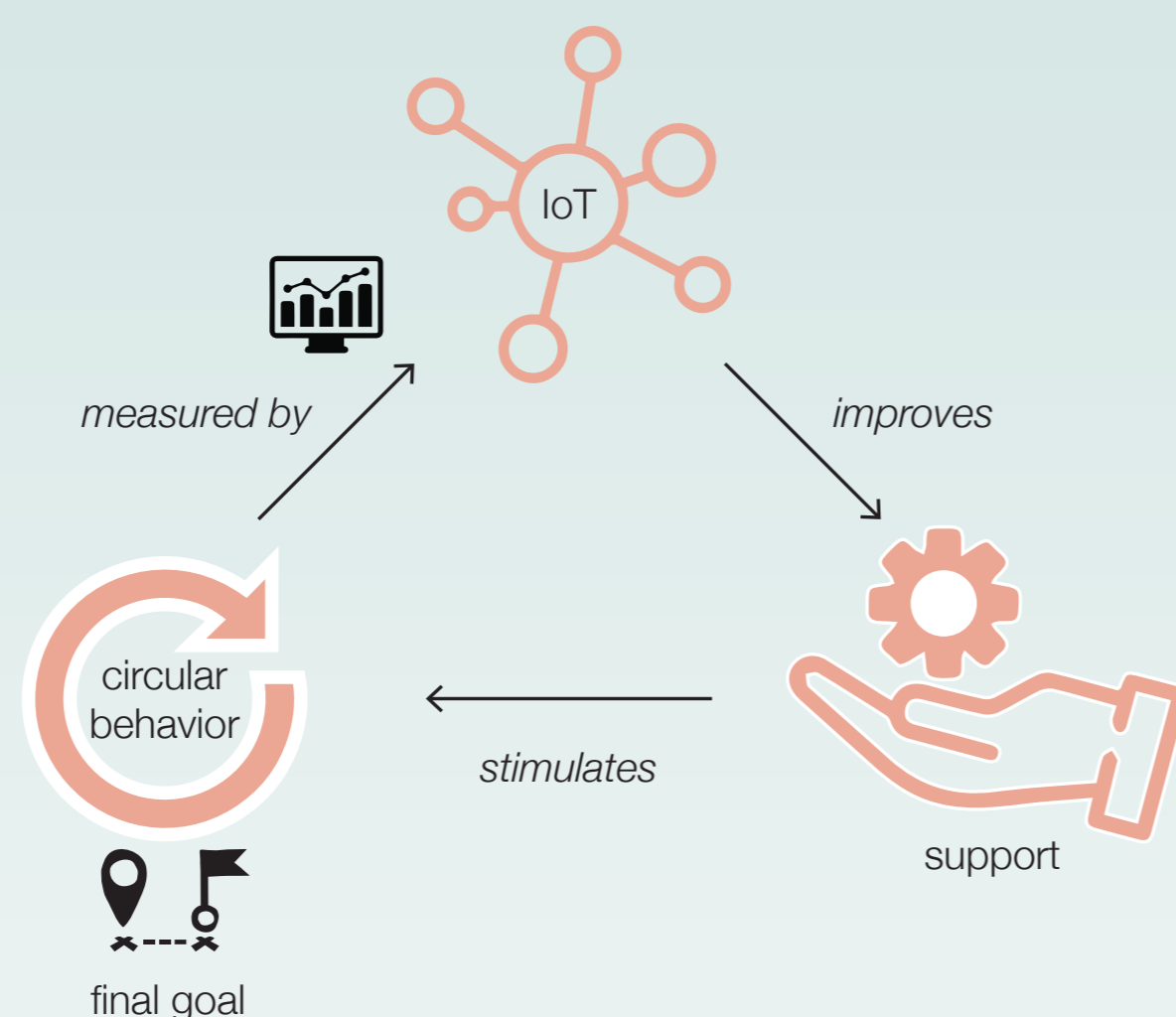
In case of malfunction, consumers easily give up on a product. This throwaway mentality slowly became part of Western society (Cooper, 2013) and led to environmental challenges such as global warming, dealing with electronic waste, and the depletion of natural resources available on our finite planet. It would be more efficient if people associate quality brands such as Philips with something you repair or maintain in case of malfunctioning.

USER RESEARCH

1. There is a clear and growing need for support at the point of product malfunctioning. At this point, users feel frustrated because they do not know how to resolve it. Therefore they are tempted to give up and replace the Senseo.
2. Most of the frequently occurring problems can be resolved by one-off user actions such as descaling or replacing a magnet within the product.
3. Within Philips there are lots of data gaps, in particular about the stage post-sales. There is no track record of what happens to the product after sales and very few consumers register their product. The lack of data makes it difficult to improve the quality of the support.

OPPORTUNITIES & CHALLENGES

1. Prevention: procrastination of obsolescence due to malfunctioning. Create awareness and provoke on the required maintenance such as regularly descaling.
2. Intervention: at the point of malfunctioning. Offering guidance through available options (in maintenance, repair, disposal). Tackle unawareness of which actions are required.
3. Profitability: to make product lifetime extension viable and desirable for Philips.



HOW CONNECTIVITY CAN CONTRIBUTE

Integrating connectivity in the Senseo responds to the consumer's need for support at the point of malfunctioning and to the after-sales data gaps at Philips. Connectivity can improve support because it facilitates easy access. The support stimulates circular behavior as users that receive support are encouraged and more likely to solve the problem instead of replacing the product. By registering the product, user data can be gathered. This enables a virtuous circle because with the collected data the support can be based on customer segmentation (e.g. demographics) and users can receive more customized support.

VISION

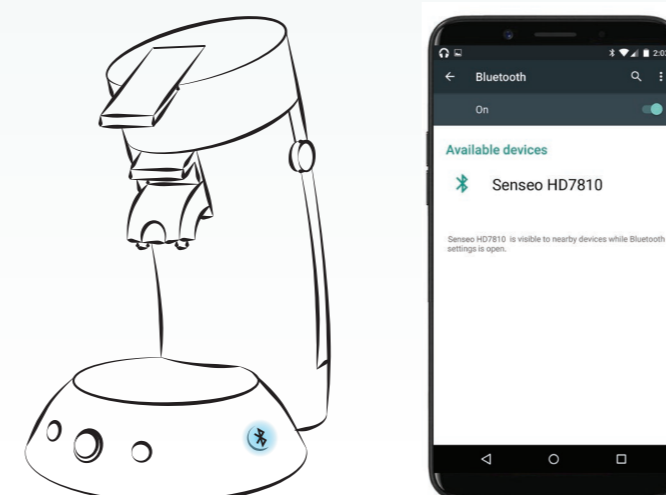
The design contributes to the Utopian vision that with connectivity, the Senseo has an unlimited lifetime and any of its parts can be replaced. Of course this is an ideal situation which cannot be achieved on the short term. By creating a roadmap, three horizons are proposed that contribute to getting closer to achieving this vision.

Horizon 1: Quick and easy access to support



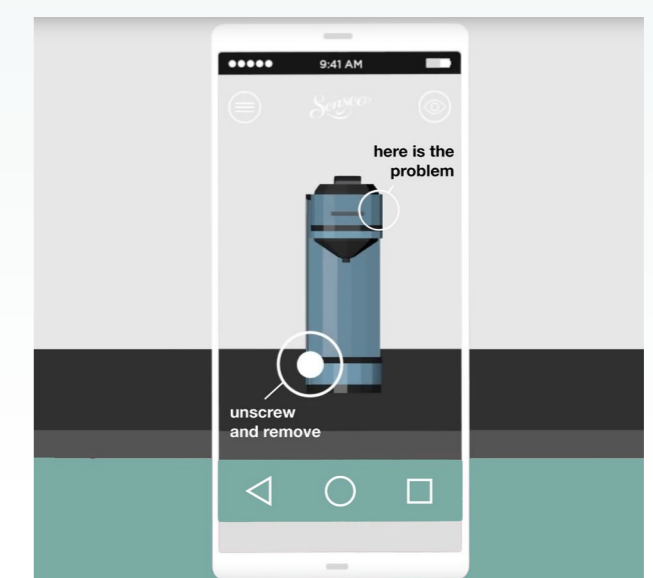
NFC TAG

Horizon 2: IoT connectivity and problem indication



BLUETOOTH LOW ENERGY

Horizon 3: Real-time problem solving guidance



AUGMENTED REALITY

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7-1-2019
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