WaterCue

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INTRODUCTION

Most people do not know how much tap water is spent, when taking an 8-minute shower. This might not seem like a problem of major concern at this moment, but as water resources are slowly getting scarcer globally, every drop counts. The typical solution to the problem is either reducing the flow rate by changing shower heads, or monitoring time by using a stopwatch. Neither of these methods are particularly effective (or unobtrusive), nor do they address the fact that we have to *actively* and *consciously* be aware of our actions as having a direct and often negative impact on the environment. This can be done by "nudging" the user towards an environmentally correct behaviour and this is exactly what we propose to do with the concept, which we are currently building a design for. What we have outlined is a design which can be integrated and signal visually, when a bath has reached the appropriate length.

THEORY

Why do we want to change people's behaviour when taking baths in particular? The short answer is that you have to start somewhere, when you want to make visible the environmental impact of our everyday actions. And if you want to efficiently modify this behaviour in generations to come, it makes perfect sense to embed a nudging technique into personal hygiene, which is something that is learned at a very early age and then passed on. Nudging is a technique which has been used in several fields, and is well documented. It works by "pushing" the user towards an appropriate behaviour, but only by suggestion and not force.

METHODS

The product we are designing works as a visual cue to the user, hence the name: "WaterCue". It changes color immediately when a bath exceeds 5 minutes. It is made mainly from recycled plastic material, it does not operate on batteries or have any movings parts. It is designed to help you save, not tell how much is actually saved. You save - that's it! Today, the average bath takes around 8 minutes with a typical flow rate of 12L per minute, and by proposing to reduce this by at least 3 minutes for every bath, will effectively save 13.000 litres of drinking water a year pr. person. This is a conservative figure, and in some cases the reduction might be even larger. The energy used for heating up water results in a carbon footprint. We completed a simplified LCA to see how large this footprint would be in Copenhagen. The results only showed a rather small reduction in CO2 emissions.

CONCLUSION

We propose to test and document the achieved effects during the 3 week course period. By building a series of mock-ups and testing them in 20 households, we can measure the reduction in water usage. We will then follow up with questions regarding perceived changes in behaviour, and build our prototype / finished product based on these results.