## Design IoT Supported User Interventions for Sustainable Washing Usage

## Introduction

Nowadays, the increasing populations and the higher demands of human's life are creating a high pressure on the environment. Laundry as a routine for all the families, requires a large number of resources especially with regards to its water and energy consumption. With the innovation in both the business model and IoT technology, HOMIE is currently working on making positive impact on the environment with their "Pay-per-use" smart washing machine. Even though the result shows it is effective, according to the research, users' behavior change could assist in saving even more resources.

Therefore this project is established to explore the IoT supported interventions to stimulate sustainable user behavior in the washing process.



## Concept

The main outcome of the project is a set of loT supported interventions based on the washing machine, the machine interface and mobile application to influence users on decisions during the laundry process, to spur sustainable choices and foster sustainable washing habits.

The final intervention concept is made up of 4 main components, the HOMIE loading bag(1) for measuring the loading amount of clothes, the washing machine interface(2) for giving the personalized real-time sustainable feedback, the mobile application(3) for keeping motivating the sustainable behavior and the personalized real awards(4) which are consistent with the game users choose for rewarding the sustainable habits.





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