

Smart Showerhead

Problem

Many place in the world are suffering from water scarcity problem, home water waste is a serious problem, especially when people in the shower. Our problem is water waste in the shower. Our product's purpose is to save water and help people get into the habit of water saving.

Opportunity

Existing solutions like Low-flow showerhead, Shower Manager are just save water on the shower device, but people still can take a long time shower under the condition of the unconscious. Our solution brings the user with water saving consciousness when they are taking shower. Our product can directly spray water, automatically turn off when people are not around showerhead. Not only save the water through the function, but also have a LED light to remind people and can calculate water consumption then record the daily water flow, get into the habit of saving water while taking a bath.

Solution

Design a smart showerhead to save water in the shower.

- Add a sensor that can calculate water consumption
- Connect with atomization function
- Can automatically turn off when people are not around showerhead.
- Build-in LED light to remind people water consumption and bring a better atmosphere.
- Come with a smartphone application can record how much water you used in the shower then give you some advices, and can setting the water consumption by the phone.

Free Space to Utilize for What You Feel is Necessary

Showering drives almost 17 percent of water use in homes, and according to the U.S. Environmental Protection Agency (EPA), an average American family uses some 40 gallons of water per day in the shower. This amounts to 1.2 trillion gallons of water in the United States each year, enough to supply the water needs of New York and New Jersey over the same time period. If 20 percent of that is wasted, well, over 200 billion gallons, in a world where gigantic states and megacities are suffering from drought and water scarcity problems are expected to become still worse in the decades ahead.

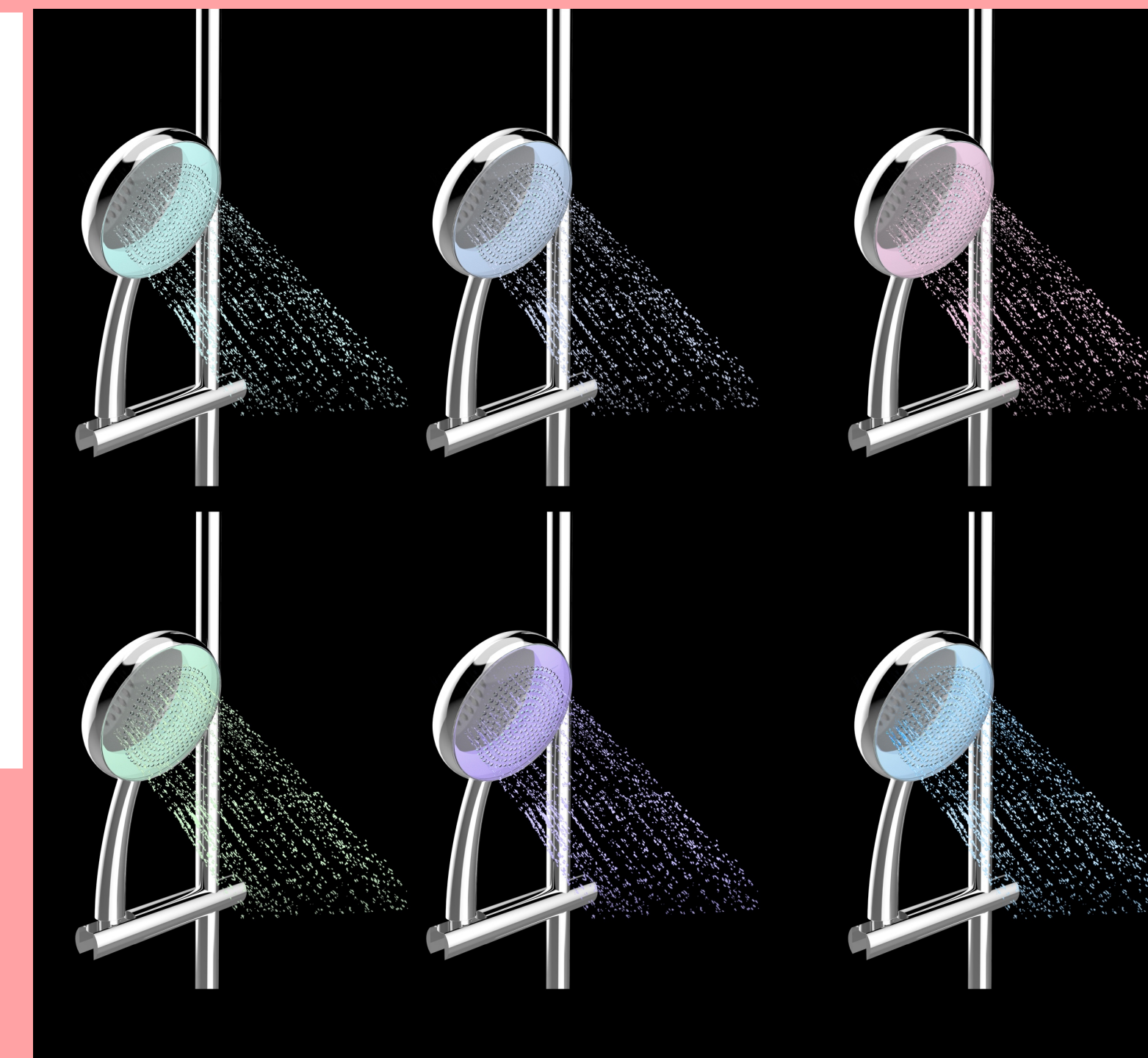
Resources

We will buy some component or update design ideas to reduce costs and save more water. Test the product and record the parameters.

Pictures, Graphics, Charts, Tables, etc.



Breakdown structure



Different colors bring user a better atmosphere

Team Member Names, Majors, and Years in School

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