

## Design of Bathroom Cleaning Device for Household Applications



**A. S. Yogish**

yogishas48@gmail.com  
Ph. No: 0 99729 32054

<b>Student's Name</b>	<b>A. S. Yogish</b>	<b>PD (FT-2012)</b>
-----------------------	---------------------	---------------------

<b>Academic Supervisor(s)</b>	C. Dileepa and Sharath S. Sirsi	
-------------------------------	---------------------------------	--

<b>Industrial Supervisor(s)</b>		
---------------------------------	--	--

**Keywords:** Bathroom Cleaning Device, Aesthetics, Usability, 3D Model, Working Model

### Abstract:

The proposal project is to design a bathroom cleaning device which is suitable for all the bathroom accessories fully like basins, floors, and taps focusing on functionality, ergonomics, hygiene and safety. Bathrooms are often reported as one of the most difficult and most important areas to clean, because toilets potentially harbor bacteria, it is critical that they be cleaned frequently to maintain a clean and odor free appearance. The key to any effective bathroom disinfection process is to first remove the dust and other dirt particles that provide a breeding ground for germs.

The most essential factor in cleaning is to make operation simple and effective to give a pleasant appearance as well as the better space for storage and hygiene. This helped us to design the product starting from knowing the products available in the market, as well as end user requirement and satisfying them. The project methodology started from studying products available in the market, user's opinion, data collection, analysis, ergonomic study Quality Function Deployment (QFD), Product Design Specifications (PDS), concept generation, selection and making the working model for cleaning the bathroom. User opinion on the product was collected. The problems identified in the product and recommendation for improving the product was listed out.

Five concepts have developed and after based on weight ranking selection method one concept was selected and digitally rendered in many colours. Selected final concept is made working model in 1:1 scale to validate functionally, ergonomically, aesthetically. Feedbacks were collected from the users and it is positive and satisfactory.