Baligi IFR Industrial Flatwork Robot





Elyse Soracco
Erin Alcott
Laasya Chukka
Miti Shah

PROJECT ABSTRACT

The *Baligi IFR* (industrial flatwork robot) is an autonomous pressure washing robot designed to increase efficiency and reduce water waste in the commercial flatwork industry.

Flatwork

cleaning large, flat surfaces

Pressure Wash

using pressurized water to clean

Baligi LLC

reducing water waste with tech

IMPLEMENTATION PLAN

Our Development of an automated solution for commercial

Goal use: an industrial flatwork robot.

Plan for Continue contact with pressure washing companies; **success** deliver a product that will be purchased and used.

Farther Develop a sustainable business model that will allow us to continue launching water-saving technologies.

PROBLEM WE'RE SOLVING

Flatwork is riddled with human error = excess water usage. On average, 10.2+ gallons of water 'lost' for every 500 sq ft washed.



Automating flatwork would save an estimated 6 bathtubs worth of water every day.

That's roughly 500 gallons per work crew, per company.

OUR NEXT STEPS

The best way to make an impact in the pressure washing industry is to focus our product on medium to large companies that offer flatwork. These stakeholders are washing huge amounts of surface all day every day, which correlates to more potential water saving.

Strategy: work alongside industry partners >>> beta testing!

STAKEHOLDER RESEARCH

We spoke with 16 representatives (owners, workers, admin.) for medium-to-large pressure washing companies which offer flatwork.

Efficiency was every company's top priority.

15000+ sq ft of flatwork daily on average.

\$10750 average willingness to pay for a solution.

RESULTS + LESSONS

From initial prototyping to business and legal matters, we are seeing progress as a team toward completion of the beta test model. We have already learned so much, and are excited to continue this project!

