

# SecuFoam

Smart Dispenser Network



# Introduction

**The disappointing feeling of using a soap or sanitizer dispenser that does not work...**

A simple idea was born to optimize the operation and management of hand-washing facilities

...and bring innovation to life to improve institutional resilience against common illnesses.

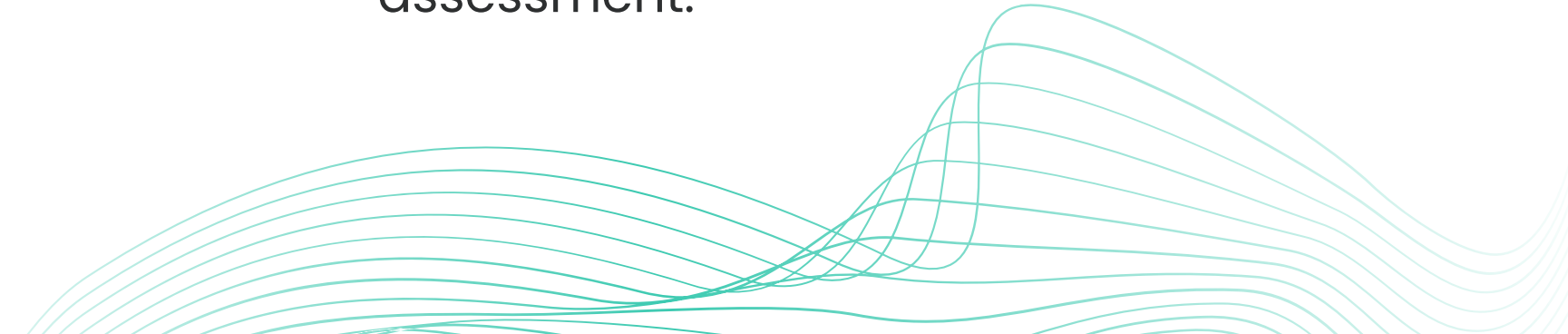


## Company Overview

**We are reinventing** the way large organizations approach public health through data-driven solutions.

**We are enabling** sanitizing stations and soap dispensers with data processing capabilities.

**We are creating** enterprise software and mobile application to optimize operations and generate public health assessment.



# Communities & Cities of Tomorrow



## Internet of Things (IoT)

- enabling of data collection and exchange
- opportunity for more efficient processes and improved decision-making

Relevant terms: **Artificial Intelligence & Big Data**

## Today's Utility

- Smart homes
- Traffic monitoring
- Energy management

# Problem

Public health vulnerability

## Facilities Upkeep

Existing dispensers:

- No operational tracking
- No alert system
- **60%** inoperable (GWU)

## Health Impact

- Higher spread of illnesses
- Missed class time
- Lost work time and wages
- Stress and anxiety

## Economic Burden

- US hospitals: **\$28–48 billion** annually
- Top 400 universities: **\$183 billion** in 2021 (*COVID-19*)
- GWU: **\$53 million** per semester (*missed classes*)

## Commonly Acquired Infections

US Hospitals

**2 million**  
annual  
cases

**90,000**  
deaths

**80%**  
from  
contaminated  
hands

# Solution

Modern technology sustainability & privacy



## Maintenance Schedule

Predictive analysis of estimated time until required station maintenance or refill

## Utility Record

Collection of dispenser usage data, battery charge, liquid levels, & operational status

## Waste Minimization

More efficient use of resources such as batteries, soap, & sanitizer liquid

## Health Metrics

Each device is outfitted with a temperature sensor to track population health and spread of disease





## **Collection & Accuracy**

- Seamless & automated
- Consistent measurement

## **Privacy**

- Anonymous
- Publicly available data

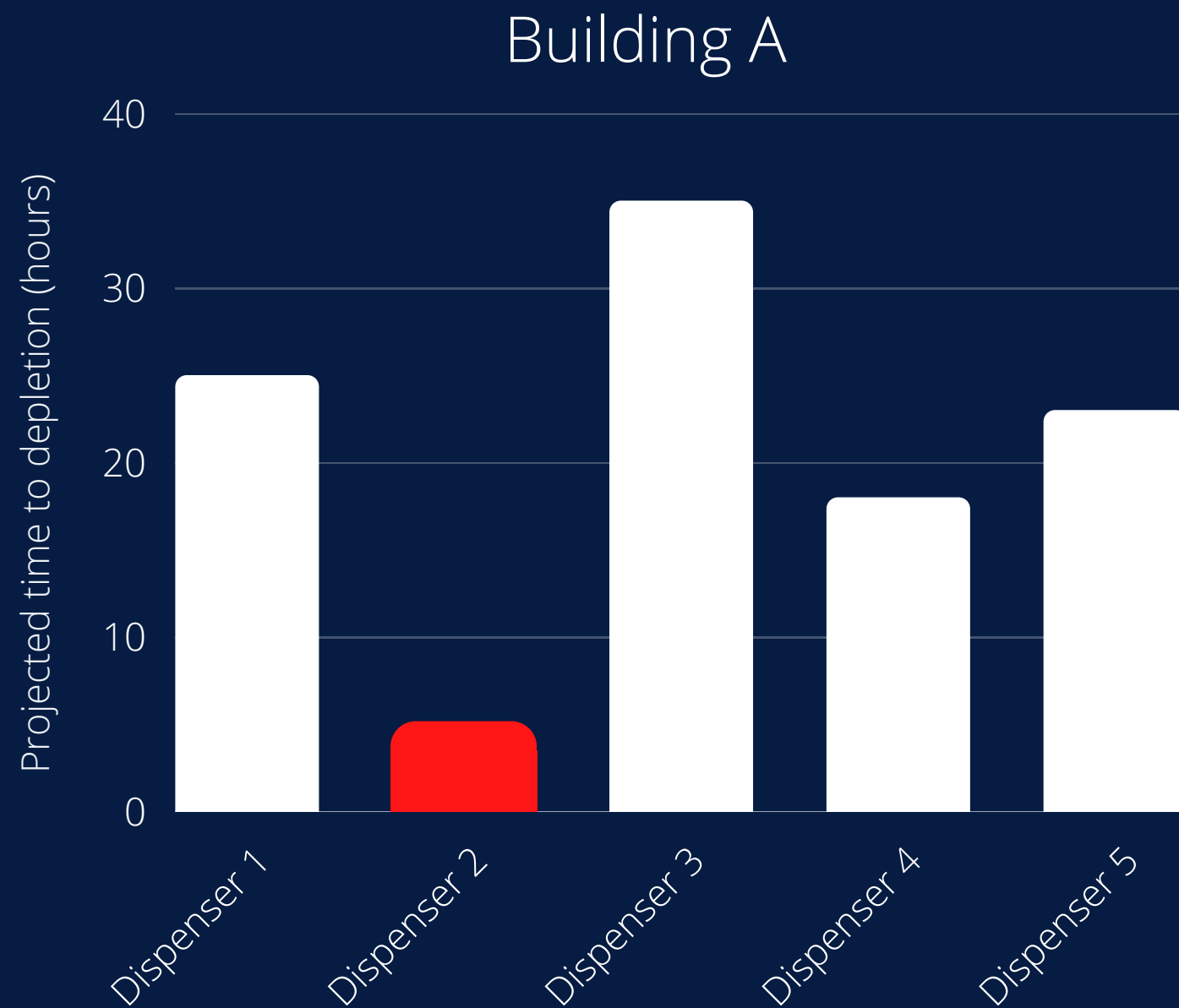
# **Temperature Metric**

Reliable & transparent

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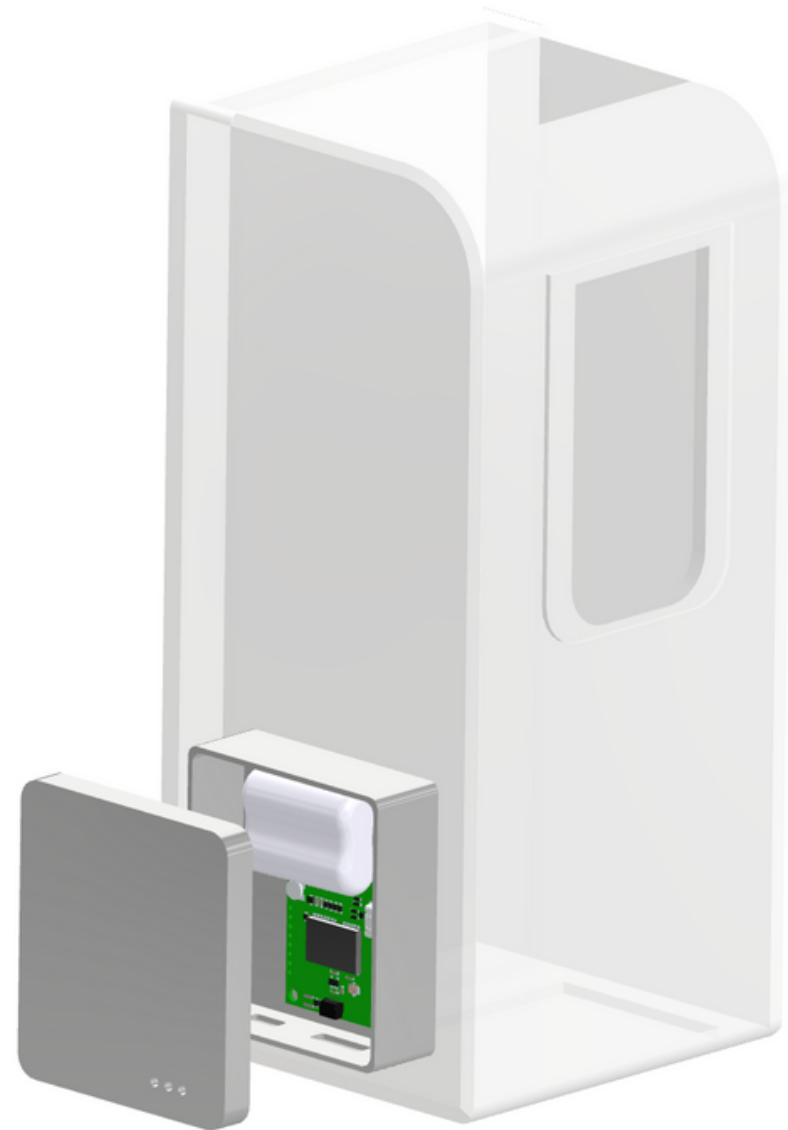
# Think Data

## Location-specific metrics



Graphics are for conceptual representation only, not an actual product.

# Business & Financials



SecuFoam Smart Kit

## Dispenser Hardware *Transactional*

**Mobile Sanitizing Station**  
\$125

**Soap Dispenser**  
\$100

**Smart Kit**  
\$50

*Installation available at  
additional cost*



## **Software** *Subscription*

### **Enterprise Software**

\$7,000\*

- small institution
- < 30 installations

Up to \$15,000\*

- for large institutions
- 100+ installations

*\*price estimates*

### **Mobile App**

Available to institutions and  
general public

FREE download

- In-app purchases  
available



## Data Brokering

### Businesses & Services

- Public foot traffic
- Advertisement
- Consumer preferences

### Public Health Organizations

- CDC & WHO
- Local Health Departments
- Epidemic Surveillance Organizations



# Target Market

*Large institutions with  
hightened risk of illness  
transmission*

CASE: GEORGE WASHINGTON UNIVERSITY

**500 INSTALLATIONS**

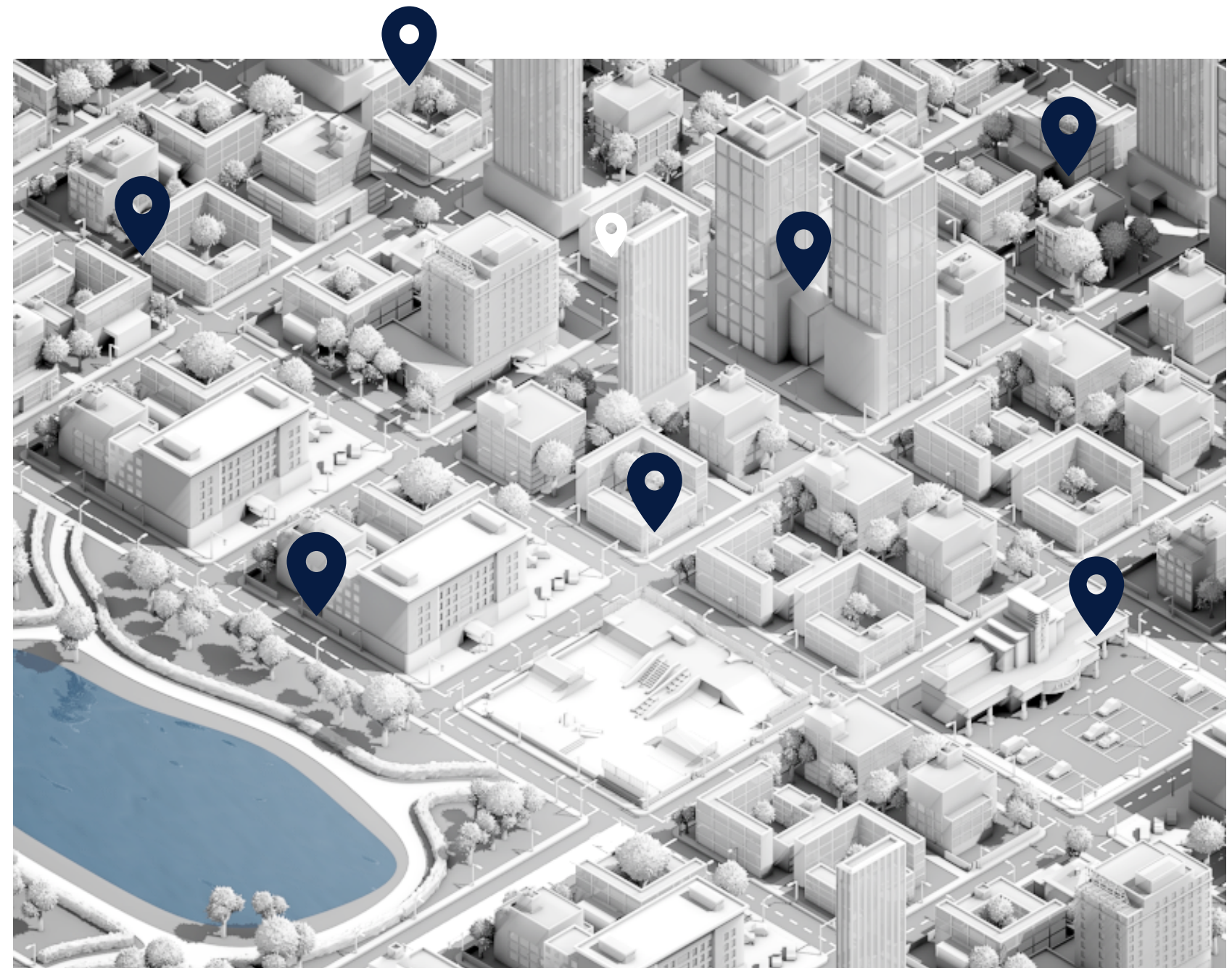
**25,000 STUDENTS & STAFF**

**HARDWARE \$ 42,500**

**SOFTWARE \$ 15,000**

**REVENUE \$ 57,500\***

*\*estimates with 400 soap dispensers at 50% outfitted with smart kits and 100 sanitizing stations without considering revenue sources from data brokering*



*Pinterest*

**Initial target market:**  
Universities and Hospitals

# Market Overview

**5.1% CAGR**  
**Projected Growth**  
**2022 – 2030**

**\$ 13.00 billion**  
**Market Value**  
**2021**

**\$ 19.80 billion**  
**Forecast**  
**2030**



**Health Awareness**



**Infrastructure Development**



**Oscar Southwell**

Project Manager



**Yahya Aliyu**

Product Architect



**Anton Yanovich**

Commercial Lead



**Huzeyfa Telha**

Software  
Development Lead



**Moustafa Montaser**

Business Analyst

# Our Team

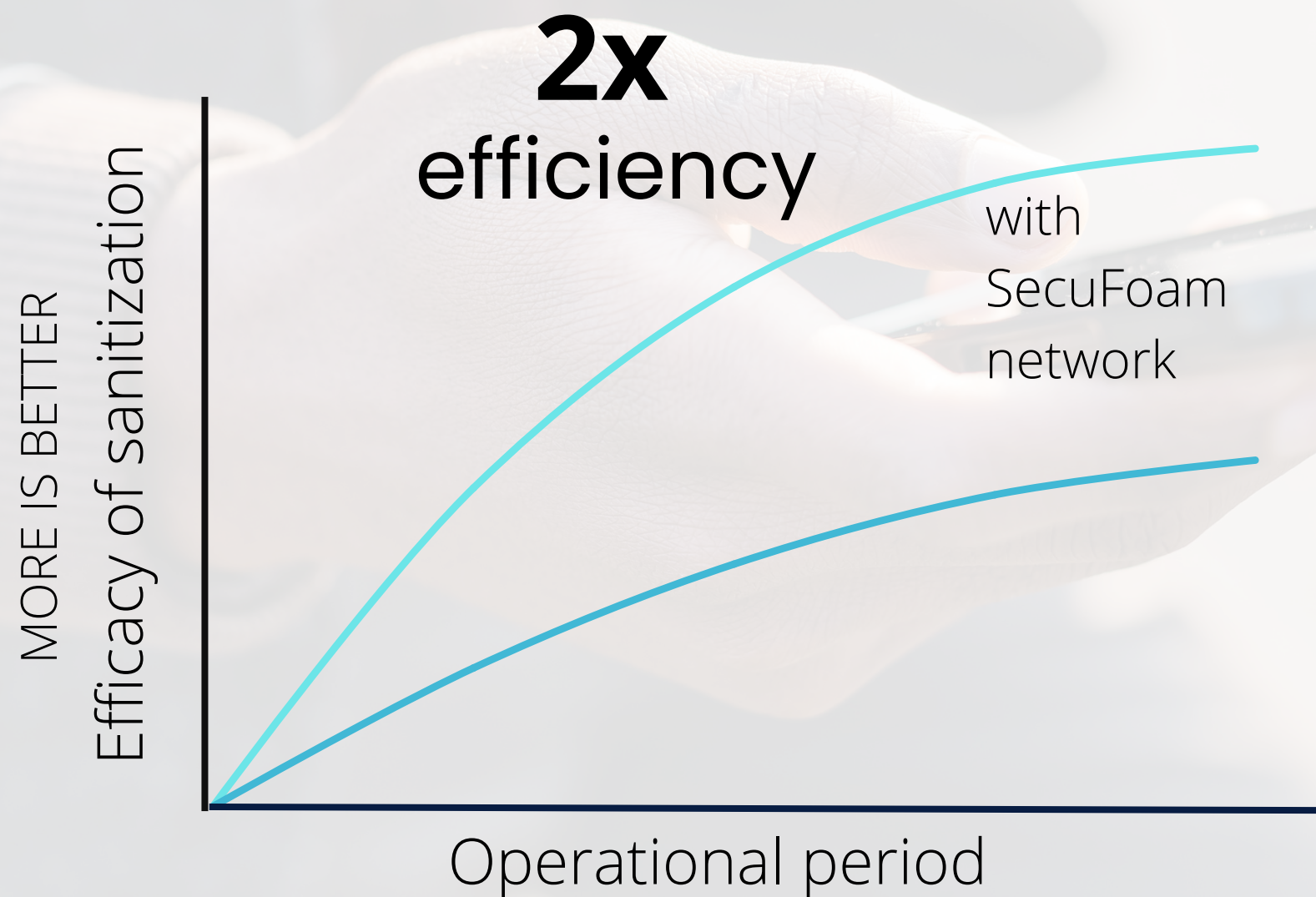
We are a multidisciplinary team of engineers with a shared passion for solving real-life problems in our community and the world.

Special thanks to **Dr. Kartik Bulusu, Dr. Johan Ferreira, Dr. Steven Shooter & GW I-Corps**, who have mentored us on the technical and entrepreneurial aspects of the project.

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# Power of Data



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# Thank you!

**For joining us in *uncovering*  
*the future of public health***

**George Washington University**

New Venture Competition 2023

**SecuFoam**

