Kapacitet: Highlighting Sustainability Initiatives for an R&D Engineering Consultancy



## **Meet Our Team**



Emily Sollecito

Chemical and
Mechanical Eng



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Mechanical Eng



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Mechanical Eng



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## **Overview**

- 1 Our Project Partner, Kapacitet
- 2 Mission
- 3 Results & Key Findings
- 4 Wall of Sustainability
- **5** Conclusions & Recommendations



## **Our Project Partner**



Engineering.
Built on theory,
fueled by practice.

## Lack of Sustainable Standards in R&D





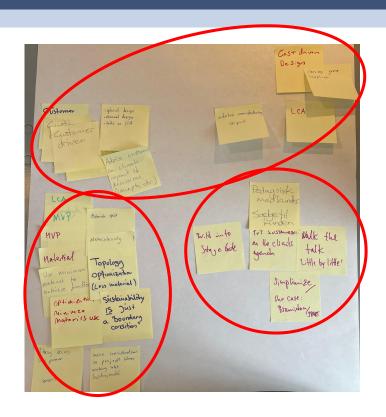


Technolution<sup>th</sup>

People driving innovation



## **First Workshop Provided Insight**



### **Common Themes**

- Prioritizing customers and cost
- Moving "little by little"
- Minimum Viable Product approach

## What is the "Minimum Viable Product"?



- Makes the design as simple as possible
  - Inherently sustainable
- "Cuts the product to the bone"

# **Employees Interviews Provided Perspective**

Variety of positions & •••••• backgrounds



## A Method to a Mindset



Co-Founder & Chairman, Jens Peter Bredholt

MVP

Minimum Viable Solutions

# **Discussion Showed Buy-In**

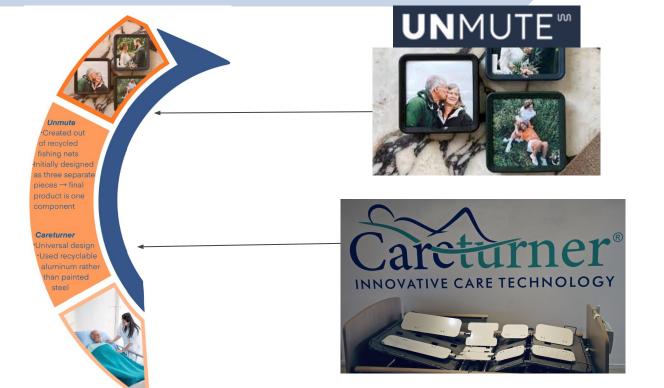




## **Physical Wall of Sustainability**



## **Developmental Sustainability**



# **Human Health Sustainability**







# **Environmental Sustainability**







QR Code linking to Hydro Hull Cleaning Video

#### Little Sun's Solar Lamp

\*Uses solar power
•Replaces hazardous
kerosene lamps

### **Human Health**

#### SolarSack

Removes bacteria in water using solar energy Gives communities

better access to safe drinking water

## **Developmental**

#### Unmute

Created out of recycled fishing nets Initially designed as three separate pieces → final product is one component

#### Careturner

\*Universal design

\*Used recyclable
aluminum rather
than painted



#### Simplify every step of the process



# Minimum Viable Solutions Decrease material usage Reduce carbon footprint

Reduce carbon footprinSupport clients goals

"MVP is, at its core, a sustainable way of thinking. It explains that you should only do what you need to do." - Jens Peter



imiting cross-contaminations Reduces fuel consumption by increasing the hull's hydrodynamics

Fully electrical hull cleaning ROV and surface setup Replaces live divers as shown on left





## **Conclusions & Recommendations**

- 1. Make sustainability a part of the client's agenda
- Advertise simulations
- Visualize material choices



# Adding a Digital Aspect to the Wall of Sustainability



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#### Little Sun's Solar Lamp

Uses solar power Replaces hazardous kerosene lamps

#### SolarSack

water using solar energy

better access to safe

# Unmute

product is one

Careturner

aluminum rather than painted

steel

fishing nets Initially designed as three separate



# Thank you!

# **QUESTIONS?**

### Simplify every step of the process



#### **Minimum Viable Solutions**

·Decrease material usage Reduce carbon footprint ·Support clients goals

"MVP is, at its core, a sustainable way of thinking. It explains that you should only do what you need to do." - Jens Peter



#### **Hydro Hull Cleaning**

Reduces fuel consumption hydrodynamics

Fully electrical hull cleaning ROV and surface setup Replaces live divers as shown on left

