The swimming clubs will use this Virtual eye to monitor the activity of

the swimmers and alert the life guards if there is any emergency.

# 1. CUSTOMER SEGMENT(S)

CS

## 6. CUSTOMER



### 5. AVAILABLE SOLUTIONS



Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

In the past, they hired life guards to, Extreme power consumption for underwater camera usage and the

- Practice scanning and observing the water.
- Recognize the physical signs of drowning.
- Keep an eye out for other problems.

#### Pros:

Well trained and experienced lifeguards

#### Cons:

- Increased exposure to chlorine
- There is always an uncertainty in this job

## 2. JOBS-TO-BE-DONE / PROBLEMS





### 7. BEHAVIOUR



- Consistent monitoring of swimmers.
- Alerting the life guards when drowning is detected.
- There is a possibility of False judgement in drowning detection by the system.

- 9. PROBLEM ROOT CAUSE
  - Not being able to swim

budget is increased

a chance of false judgement.

High maintenance for underwater camera thereby increasing cost.

There is an uncertainty in the functionality of this system i.e there is

Alert system and underwater camera should be connected 24/7.

- Missing or ineffective fences around water
- Lack of close supervision
- Location
- People with medical condition

- Directly related: The life guard will rely on the virtual eye when he is on a break.
- Indirectly associated: A backup generator for an uninterrupted power supply to have the cameras working 24/7.

# 3. TRIGGERS



## 10. YOUR SOLUTION

## SL

## 8. CHANNELS of BEHAVIOUR



An efficient system which detects and alerts accurately when a person is drowning.

As a POC we make use of one camera that streams the video underwater and analyses the position of swimmers to assess the probability of drowning, if it is higher then an alert will be generated to attract lifeguard's attention. The system is not designed to replace a lifeguard or other human monitor, but to act as an additional tool. "It helps the lifeguard to detect the underwater situation where they can't easily observe.

Alert is sent through the application to the life guards mobile when drowning is detected, provided the life guard is in the vicinity.

## 4. EMOTIONS: BEFORE / AFTER



Confused, insecure > trust worthy(safe), feels in control of the situation.

#### 8.2 OFFLINE

The Emergency warning system will alert the life guard and people surrounding the swimming pool with emergency sound and light. This helps in preventing the chances of drowning

