# Problem-Solution fit canvas 2.0

# Purpose / Vision

## 1. CUSTOMER SEGMENT(S)

CS

6 CUSTOMER CONSTRAINTS CC

## 5. AVAILABLE SOLUTIONS

AS

Explore

AS

Focus on J&P, tap into

BE, understand

Every candidate attending a National Pool Lifeguard Qualification (NPLO) course must be 16-years-old and jump or dive into deep water. swim 50 metres in less than 60 seconds. The average age of an employed certified lifeguard is 26 year old.

In this a best Pulse Rate sensor is used to detect the pulse rate of every swimmer it helps to prevent fro drowning accident .

The main problem is an alert is being sent to Lifeguard only

Prediction process take place only after drowning But we used Deep learning algorithm for Pulse rate detection so that there is a chance for predicting the drowning accident at earlier stage Merits: predict before drowning under water

Demerits: If network is not available then it doesn't give a result.

# 2. PROBLEMS

J&P

### 9. PROBLEM ROOT CAUSE

RC

#### 7. BEHAVIOUR

BE

- Beginners, often feel it difficult to breathe underwater which causes breathing trouble which in turn causes a drowning accident in swimming pool
- As water is much denser than air, so there is much more resistance preventing people from being able to move through it guickly and freely so sometimes even the experienced people will find difficulty to swim.

however, they cannot save a person before drowning down

after the person is drowned down.

- · Saving people life
- Take effective action in emergency situation
- · Attentive and energetic

## 3. TRIGGERS



- 2. Send an alert message to the LlfeGuard
- Helpful for earlier prediction of drowning

#### 10. YOUR SOLUTION

SL

8. CHANNELS of BEHAVIOUR



- Swimming is one of the best exercise that reduce the stress but because of certain reason the drowning accident take
- In our project we used pulse rate detection so there is an chance for earlier prediction and help to avoid the drowning accident.

# ONI INF

1. Accurate pulse rate detection

#### 4. EMOTIONS: BEFORE / AFT ER

EM

TR

Before the detection of active drowning there were many drowning accident worldwide after this , they can only save the drowning person after he/she is drowned down by sending an alert to Lifeguard

#### 8.2 OFFLINE

Unaccurate pulse rate detection

Extract online & offline CH of

fit into

CS.

**Define**