

## PROJECT DESIGN PHASE-I

### SOLUTION FIT

**Project Title:** Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning

**Team ID:** PNT2022TMID16644

Define CS, fit into CC	<b>1. USER SEGMENT(S)</b> <span>CS</span>  Person who swim in the pool are meant to be constantly kept an eye over them by visual based monitoring system.	<b>6. USER CONSTRAINTS</b> <span>CC</span>  <ul style="list-style-type: none"><li>➤ Cost for initial investment and maintenance.</li><li>➤ Constant network connection.</li><li>➤ Camera misunderstanding normal swimming actions to be abnormal.</li></ul>	<b>5. AVAILABLE SOLUTIONS</b> <span>AS</span>  <ul style="list-style-type: none"><li>➤ Detects and prevents active drowning.</li><li>➤ Setting up of camera and monitoring each and every person swimming in the pool setting an alarm to notify the Lifeguard.</li></ul>
	<b>2. JOBS-TO-BE-DONE / PROBLEMS</b> <span>J&amp;P</span>  <ul style="list-style-type: none"><li>➤ Many deaths account for the third cause of unplanned death globally about 1.2M cases per Year.</li><li>➤ Existing visual based monitoring systems are too economical and these are needed to environment.</li></ul>	<b>9. PROBLEM ROOT CAUSE</b> <span>RC</span>  <ul style="list-style-type: none"><li>➤ Anticipation over all the other system happens when one device fails to do its service.</li><li>➤ People think that the camera that is set up to monitor the persons who are swimming are of no proper and accurate use.</li></ul>	<b>7. BEHAVIOUR</b> <span>BE</span>  <ul style="list-style-type: none"><li>➤ The customer will exhibit his behavior until an authenticated - application serves its purpose rightly.</li><li>➤ The customer believes more in a manual monitoring system rather than a visual monitoring system.</li></ul>

**3. TRIGGERS****TR**

- Economical installation cost also plays a pivotal role.
- The customer is triggered by their surrounding talking about this approach of detecting and preventing active drowning.
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**4. EMOTIONS: BEFORE / AFTER****EM****BEFORE :** Fear of unprotected swimming**AFTER :** Fearless and satisfactory swimming experiences**10. YOUR SOLUTION****SL**

- The proposed system makes a unique attempt to evaluate swimmers condition by analyzing their motion and shape features through visual based monitoring device and an alarm to alert, and provides solution in detecting drowning incidents.
- While challenging in many aspects, a successful system will bring inestimable value in saving human lives.

**8. CHANNELS of BEHAVIOUR****8.1 ONLINE**

- Develop an application and provide all sort of assistance to the users regarding the virtual eye.

**8.2 OFFLINE**

- Provide quality safety wares while swimming.