

## Project Design Phase-I

### Problem Solution Fit

Date	19 September 2022
Team ID	PNT2022TMID53114
Project Name	VirtualEye - LifeGuard for Swimming Pools to Detect Active Drowning

#### 1. CUSTOMER SEGMENT

**CS**

Pool Owner  
Resort Owner  
Schools  
Universities

#### 6. CUSTOMER CONSTRAINTS

**CC**

Small organizations are not able to generate enough capital to pay the lifeguards. A lack of awareness about the safety precautions and the need to install a more secure digital solution.

#### 5. AVAILABLE SOLUTIONS

**AS**

Customers are faced with the problem of either employing a more capable individual on duty or increasing the number of lifeguards.

This would need more capital, research and investment in the human resource that isn't always possible depending on the scale of the organization.

But on the other hand, communication can be done by anyone.

2. JOBS TO BE DONE/PROBLEMS

J&P

Able to detect when someone is drowning even when the lifeguard on duty is unable to perceive with the naked eye.  
Ensures safety of the people in the pool.

9. PROBLEM ROOT CAUSE

RC

It is not so common for incidents to happen in swimming pools so lifeguards can get lax about their duties.  
Another reason being drowning in a pool cannot always be detected from the sidelines (outside the pool).

7. BEHAVIOR

BE

Customers, once aware of the current digital solution, need to find the right location(s) along the pool to install the system and the cost to maintain it.

### 3. TRIGGERS

Seeing the number of schools or resorts employing VirtualEye to their systems and the positive results of the same.

**TR**

### 4. EMOTIONS: BEFORE / AFTER

Initially, customers would feel unsure about their safety but afterwards they can be more confident that even if there arises a case where the human stationed is unable to detect, the virtual system would handle it.

**EM**

### 10. YOUR SOLUTION

**SL**

Our solution is the one time installation of a system that automatically detects active drowning in pools.

It would replace needing extra manpower and resources to maintain their employment on a routine basis.

It will seem unfeasible initially due to the expensive nature of the one time cost, however it will pay off as a great resource to fulfill both economic as well as corporate social responsibilities.

### 8. CHANNELS of BEHAVIOR

**CH**

#### 8.1 ONLINE

Customers can read up about the system installation and maintenance. They can even place an order for the same.

#### 8.2 OFFLINE

Customers can visit locations where the system has been installed and see the test run with a dummy.