## Virtual Eye LifeGuard For Swimming Pools Project Title: To Detect Active Drowning

## Project Design Phase-I - Solution Fit Template

## Team ID: PNT2022TMIDxxxxxx PNT2022TMID14295

1. CUSTOMER SEGMENT(S)  Who to your outsome?  i.e. working parents of 0-5 yo. kids  Kids love swimming, which is also a terrific way to relieve stress.	6. CUSTOMER CONSTRAINTS  What constraints present your automore from taking action of levil their choices of solutions? Les opending power, bufget, no cash, network connection, available exists.  Such systems are typically created by mounting more than 16 cameras on the ceiling and in the water as well as reviewing the video feeds to find any irregularities.	5. AVAILABLE SOLUTIONS  Which solistors are available to the customers when they face the problem; or small in get the job chara? What have they tried in the past? What past to so these stakens have in a past of the post of these stakens have in a past of the underwater pool, where it then begin read on the custom of the entiment. This equipment's drawback is that if there are too many entiment, an occlusion insize develop. A second is that the a camera installed on the surface of the water tracks the estimates' status. Charge, When there is an air-water insoftware, light will reflect and enfant. Image capes refler "background-colon initial, there expending only" equally, and the downing guy characteristic this approach picked up in Thirdway, it is difficult to sell divers from continuons. If it is affect that Combining the row, numbing serial and underwater cameras, Observing the status of the evinement. This system requires engining monitoring, it is the primary drawback.
2. JOBS-TO-BE-DONE / PROBLEMS Which jobs to be done (or grathered do you address for your customers? These could be more than one, explore diffusion sides.  Numerous people drown each year, including young children under the age of 5, in the deep end of swimming pools, and lifeguards are ill-equipped to deal with these emergencies.	9. PROBLEM ROOT CAUSE  What is the real reason that this problem estate?  What is the back story behind the need to do  Use jub?  In customers have to do it because of the change in  regularized.  Kids love swimming, which is also a terrific way to relieve  stress. But for beginners, breathing can be difficult in the  water, which can lead to choking and loss of balance and leads  to a drowning mishap, some unique circumstances, Such as  cramping, physical or mental illners, or collisions. The  swimmer may potentially drown due to stress and other factors.	7. BEHAVIOUR  What fore your customer do to address the problem and get the job of the disectly related. Find the right solar panel installer, calculate unage and benefits: indirectly associated customers upon fire time on solunteeting work ji.e. Green passed.  The individual who is drowning in the pool must be located, and their activities can be recognised using artificial intelligence technology.
3. TRIGGERS  What triggers customers to act? Le. seeing their respitour installing solity panels, reading about a more efficient solidon in the news.  Observing people drowning and knowing that the lifeguards are not prepared to handle these situations are the triggers.  4. EMOTIONS: BEFORE / AFTER  Now do customers feel when they fires a position or a job and afterwords? in lost, inecuse > confident, incompile use it in your communication strategy & design.  Beginners frequently experience difficulty breathing before ensering the water, which leads to choking actions, loss of balance, and drowning accidents. After the proposede Customers are feeling confident using the new technologies	10. YOUR SOLUTION  If you are working on an entiting business, write down your current solution first, fill in the cornes, and check how much it is reality.  If you are working on a new businessy persoines, then keep it blank until you fill in the currous and come up with a solution than the white currous eliminations, solves a publishmen and matches outstomer behaviour.  To find the drowning incident in the extimating pool using Human action detection. The drowning detection model will be used to precoss and cleasify wide on that will be given to the system which will be recorded using live surveillance currents. The system will break this video in image frames and apply a model over it and if the early actions of drowning like hand waring, water splashing or driving is detected then the system will set the alarm so that the lifeguards can intrine their rescue operations.	8. CHANNELS of BEHAVIOUR E.1 ONLINE What sind of actions do customers take addise? Extract online channels from #7  8. 2 OFFLINE What lind of actions do customers take affline? Extract offline dhannels from #7 and use them for customer development.