



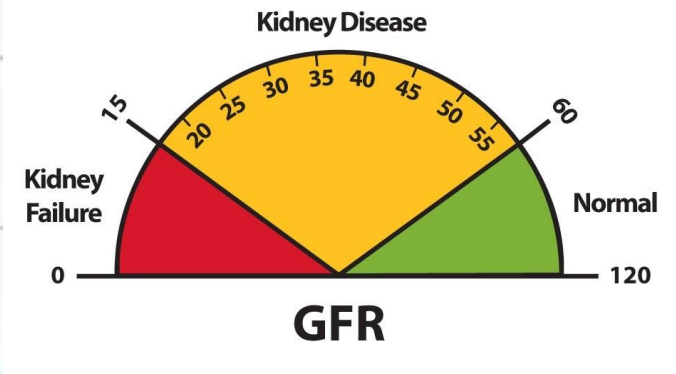




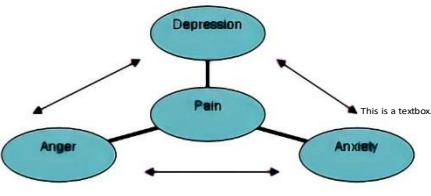
PROJECT DESIGN PHASE – I  
PROBLEM-SOLUTION FIT

|               |   |
|---------------|---|
| Date          | 01 October 2022                           |
| Team ID       | PNT2022TMID35483                          |
| Project Name  | Early Detection Of Chronic Kidney Disease |
| Maximum Marks | 2 Marks                                   |

Problem-Solution Fit canvas

Purpose / Vision

Version:

|   |   |   |  |   |
|---|---|---|--|---|
| Define CS, fit into CL                  | <b>1. CUSTOMER SEGMENT(S)</b>  <b>CS</b><br>Common people who have been affected by kidney disease   | <b>6. CUSTOMER LIMITATIONS</b> (e.g. BUDGET, DEVICES) <b>CL</b><br>Customers may be limited by the available lab facilities and testing infrastructure to detect the disease at an early date. Some common man cannot afford high rates charged by testing lab centres  | <b>5. AVAILABLE SOLUTIONS</b> PROS & CONS <b>AS</b><br>Existing Solutions: Dialysis or high dosage of medicines to treat the disease.<br>An alternative to dialysis for people with severely damaged kidney function is a kidney transplant.   | Orient AS, differentiate                |
|   | <b>2. PROBLEMS / PAINS</b> • ITS FREQUENCY  <b>PR</b><br>Existing GFR test may just tell kidney function but may not detect chronic kidney disease. Kidney transplant is very painful to both donor and receiver. In severe cases, CKD leads to fatalities which is a serious concern. | <b>9. PROBLEM ROOT / CAUSE</b> <b>RC</b><br>Since ckd doesn't show any symptoms, finding a root cause is a difficult task. They would have not noticed or ignored it at an early stage. High Blood sugar, high blood pressure, anemia, improper lifestyle and diet habits may be some of the root causes.                           | <b>7. BEHAVIOR</b> • ITS INTENSITY <b>BE</b><br>Customer may try other means of medical treatment. Lower GFR may result in kidney failure.<br>  |   |
| Focus on PR, tap into BE, understand RC | <b>3. TRIGGERS TO ACT</b>  <b>TR</b><br>They may see their friends going for GFR tests when they have symptoms of high blood pressure, blood sugar, anaemia etc. They may go for a kidney checkup when they get pain or uneasiness in the abdomen area.                                | <b>10. YOUR SOLUTION</b>  <b>SL</b><br>Developing a machine learning algorithm to detect the chronic kidney disease at an earlier stage by statistical analysis of ckd using the various parameters which are given as input to the ML models. | <b>8. CHANNELS of BEHAVIOR</b>  <b>CH</b><br><b>ONLINE</b><br>In online, they will be enquiring about various lab centres to verify cost, equipment and testing quality, accurate results, etc. | Focus on PQ, tap into BE, understand RC |
|   | <b>4. EMOTIONS</b> BEFORE / AFTER  <b>EM</b><br>Individuals may feel happy if problem is identified and cured at an early stage in a painless manner.<br>   |   | <b>Offline</b><br>In offline, customer's behavior can easily be understood so that a good guidance can be given.   |   |
| Identify strong TR & EM                 |   |   |  | Extract online & offline CH of BE       |