Project Title: **Early Detection of Chronic Kidney Disease using Machine Learning** Team ID: **PNT2022TMID01191**

1. CUSTOMER SEGMENTS CS

- Diabetic Patients.
- Person who has issues related to kidney disease.
- Medical Professionals.

6. CUSTOMER CONSTRAINTS CC

- Not getting 100% accuracy which creates fear or agitation.
- Lack of awareness of how to use the technologies.
- Network connectivity.
- Delay in getting results.

5. AVAILABLE SOLUTIONS AS

- Avoid products with added salt. Lower the amount of sodium intake in the foods.
- Control the blood pressure level.
- Adapt to new lifestyle.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS J&P

- Creation of simple user interface for the customers.
- Provide a virtual room to allow patients communicate with the medical professionals.
- Ensuring the website is responsive in the long run.

9. PROBLEM ROOT CAUSE RC

- Diabetes and High Blood pressure are the main cause of chronic kidney disease.
- Being lethargic to take regular checkup on their health.

7. BEHAVIOUR BE

- The proposed final system will take test results as the parameters (or) features for prediction. It is then trained using machine learning algorithms which predicts whether the patient has disease or not.
- Easier and faster access of system.

Focus on J&P, tap into BE, understand RC

Identify Strong TR & EM

3. TRIGGERS TR

- Some people will experience nausea, vomiting, loss of appetite, fatigue and decreased mental sharpness. This insists them to go to hospital.
- Prolonged back pain and itchy skin.

4. EMOTIONS: BEFORE / AFTER EM

- Before : Anxiety, Depressed, Frustration
- After : Peace and Self-Awareness

10. OUR SOLUTION SL

- Identify chronic kidney disease using machine learning techniques which would help in facilitating the whole process than taking manual tests. The cost of the treatment would be reduced and also prevent the loss of life.
- Ensuring the true rate of prediction.
- Providing preventive measures for those who are prone to kidney disease.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

- Patients providing appropriate test results to be entered in the web application.

8.2 OFFLINE

- Patients visit the laboratories where their details would be entered in the web application to display the accurate results of prediction.

Identify Strong TR & EM