Project Title: Chronic Kidney Disease prediction using Data Science

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Project Design Phase-I - Solution Fit Template

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Who is your customer?
iChronic Kidney Disease is most commonly iin people aged between 18-65 or older. CKD is more common in women than in men.

6. CUSTOMER CONSTRAINTS CC

What constraints prevent your customers from taking action or limit their choices
of solutions?
Unaware of earlier stages of Chronic Kidney Disease, network connection, unknown symptoms.

5. AVAILABLE SOLUTIONS AS

Which solutions are available to the customers when they face the problem

or need to get the job done? What have they tried in the past? What pros & cons do these solutions have?
Earlier detection of Chronic Kidney Disease decreases mortality rate.

Explore AS, differentiate

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

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

Which jobs-to-be-done (or problems) do you address for your customers?

Machine Learning techniques are excellent in predicting CKD. The current study offers a methodology for predicting CKD status using clinical data, which incorporates data preprocessing, a technique for managing missing values, data aggregation, and feature extraction.

9. PROBLEM ROOT CAUSE RC

What is the real reason that this problem exists? What is the back story behind the need to do this job?
Kidney disease also increases the risk of having heart and blood vessel disease. These problem slowly over a long time. When chronic disease progresses, it may eventually lead to kidney failure, which requires dialysis or a kidney transplant to maintain life. So predicting chronic disease will help to decrease the risk.

7. BEHAVIOUR BE

What does your customer do to address the problem and get the job done?

One of the best way to predicting Chronic Kidney Disease is monitor Glomerular Filteration Rate. GFR is calculated using age, gender and blood creatinine value of a person.

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

3. TRIGGERS TR

What triggers customers to act?
Seeing their neighbour predicting whether he/she has Chronic Kidney Disease and get most efficient solution.

10. YOUR SOLUTION SL

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.
A collection of disease symptoms has been performed for the preparation of data set along with the person's living habits, and details related to doctor consultations are taken into account in this general disease prediction.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7
Person must enter the clinical information, based on this it predicts whether people has CKD or not.

8.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.
If you have signs or symptoms of CKD , must see the doctor and take necessary steps to control.

4. EMOTIONS: BEFORE / AFTER `EM`

How do customers feel when they face a problem or a job and afterwards?
Increased mortality rate > People know the he/she had CKD by predicting and take treatments on initial stages.