C

Explore AS, differentiate

1. CUSTOMER SEGMENT(S)

CS

6. CUSTOMER CONSTRAINTS

CC

5. AVAILABLE SOLUTIONS

AS

- Patients who wish to examine their FCG record to classify arrhythmia.
- Lab technicians and other medical professionals who wish to classify arrhythmia from large scale ECG data.
- Presence of a computing device, laptop or smart phone to run the application.
- Basic knowledge of accessing gallery and uploading
- Possession of an email account for registering.
- · Reliable internet connection.

 There are several labs that perform ECG tests as well as many hospitals are facilitated with the appropriate appliances. Patients can directly approach a medical professional and proceed with their auidance.

• Automated methods are rarely chosen by people and clinical experts fearing unreliable services.

2. JOBS-TO-BE-DONE / PROBLEMS

J&P

9. PROBLEM ROOT CAUSE

RC

7. BEHAVIOUR

BE

- Users want to decide whether they should consult a medical professional regarding their condition.
- Users are unsure about the accuracy of the system and the validity of the results.
- Users are wary for giving their personal details in fears of leakage through various platforms.
- Medical professionals may commit errors in detecting cardiac arrhythmia.
- There could be mislabeling and/or misplacement of the patient records in lab or hospitals by the authorities b accident or carelessness which would result in loss of patient details and it could further delay treatment.
- Traditional methods take longer time and it is expensive compared to the application.

- · People consult a clinical expert and following their advice take an ECG test and report to the doctor with the results and wait for the diagnosis and treatment.
- People avoid taking an ECG test in fear of very high expense and formalities. This could endanger their condition further without proper treatment.

3. TRIGGERS

TR

10. YOUR SOLUTION

SL

CH

- It facilitates to make the classification tasks automated and quick when dealing with large data, while providing accurate and reliable results.
- 4. EMOTIONS: BEFORE / AFTER

EM

The results do not take as much time as needed by traditional methods. The expense could also be reduced by using the application.

- Develop a CNN-based classification model for classification of arrhythmias using ECG signals, helping experts to diagnose CVDs from the automated classification results.
- Make a reliable web application for the users to feed their ECG into the model that is trained and the classified class is displayed.

8. CHANNELS of BEHAVIOUR

8.1 ONLINE

Social media promoting the advantage of the application with the guarantee of experts, after research and testimony of other users, would effectively educate the general public regarding the system.

8.2 OFFLINE

Advice by doctors or lab technicians, word of mouth from other users and patients who found it reliable in their case.



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Identify strong

