Project Title: - Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation

Project Design Phase-I - Solution Fit

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

- Who affect by cardiovascular diseases he can't identify his disease and what type his have.
- Who want monitoring heart's rhythmic irregularities.

6. CUSTOMER CONSTRAINTS

- Patiant's budget
- Fear about result
- Fear on deep learning technology

5. AVAILABLE SOLUTIONS — AS

- Patiant can identify his cardiovascular disease and what type his disease.
- Customer can monitoring heart's rhythmic irregularities.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

- To make AI application to find the cardiovascular diseases present or not and it also find cardiovascular diseases type .
- This application is can be must user friendly and easy to access by any kind of people.

9. PROBLEM ROOT CAUSE — RC

A heart arrhythmia is **an irregular heartbeat**. Heart rhythm problems occur when the electrical signals that coordinate the heart's beats don't work properly. The faulty signaling causes the heart to beat too fast, too slow or irregularly.

7. BEHAVIOUR — BE

The patient should first take an ECG report in the laboratory.

The patient enters our website and uploads his 2-D ECG spectral image representation. Click the submit button. Finally he got his result.

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

Identify strong TR & EM

3. TRIGGERS TR

Doctors recommend monitoring for heart rhythm irregularities.

4. EMOTIONS: BEFORE / AFTER EM

After the patient uses AI technology.

As a result if the patient does not have any type of cardiovascular disease. He feels happy and free.
Or consult a cardiologist after the outcome

10. YOUR SOLUTION SL

A classification model to identify cardiovascular disease at their early stage could effectively reduce the mortality rate by providing a timely treatment.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

The patient enters our website and uploads his 2-D ECG spectral image representation. Click the submit button. Finally he got his result.

8.2 OFFLINE

The patient should first take an ECG report in the laboratory.

Identify strong TR & EM