Project Design Phase-I - Solution Fit

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

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1.CUSTOMER SEGMENTS	2.JOBS-TO-BE-DONE/PROBLEMS	3.TRIGGERS	4.EMOTIONS: BEFORE/AFTER	5.AVAILABLE SOLUTIONS
Physicians use it to detect arrhythmias and in the middle-aged population.	Not useful for identifying the different stages of Arrhythmia disease. Not useful in monitoring motor symptoms	To detect the heart diseases quickly and efficiently.	Before: Confused, unsure, pain After: Fear, relief, sure	The 12-lead ECG remains the backbone of arrhythmia diagnosis, however, single-lead ECG technology can be incorporated into compact wearable devices. In this proposed model, PPG-identified arrhythmias signal the device to prompt users to perform a single-lead ECG through the same device to confirm an abnormal rhythm.
6.CUSTOMER CONSTRAINTS	7.BEHAVIOUR	8.CHANNELS OF BEHAVIOUR	9.PROBLEM ROOT CAUSE	10.YOUR SOLUTION
Lack of affordable and hassle-free technology.	Leads to panic and easy detection can prevent that, earlier diagnosis.	Patients detect arrythmia by running the model and lives are saved.	Unreliable source of detection and going unnoticed.	Building a reliable technology that can address all customer needs and provide long lasting solutions.