

Define CS, fit into CC	<div>1. CUSTOMER SEGMENT(S)<div>CS</div><div>Who is your customer? i.e. working parents of 0-5 y.o. kids</div><div>Patients are customers here</div></div>	<div>6. CUSTOMER CONSTRAINTS<div>CC</div><div>What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.</div><div><ul style="list-style-type: none"><li>Need of experts</li><li>Budget problem</li></ul></div></div>	<div>5. AVAILABLE SOLUTIONS<div>AS</div><div>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 &amp; cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking</div><div>The algorithms used for arrhythmia classification Incorporate preprocessing,feature extraction,and classification. Classification becomes complicated when class overlap and class imbalance problems occur together</div></div>	Explore AS, differentiate
	<div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&amp;P</div><div>Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.</div><div>The problem here is classification of arrhythmia takes more time and requires experts. It can't be done anytime by anyone</div></div>	<div>9. PROBLEM ROOT CAUSE<div>RC</div><div>What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations.</div><div>Arrhythmia means heart is not beating properly. This can cause anything to form cardiac arrest to death.</div></div>	<div>7. BEHAVIOUR<div>BE</div><div>What does your customer do to address the problem and get the job done? i.e. Directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)</div><div>The problem of arrhythmia is directly connected to patient. When he/she feels irregular heartbeat or any breathing issues he can address the issue.</div></div>	
Focus on J&P, tap into BE, understand RC	<div>3. TRIGGERS<div>TR</div><div>What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.</div><div>The point that triggers the customers to use this is that it doesn't require anyone's assistance.</div></div>	<div>10. YOUR SOLUTION<div>SL</div><div>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.</div><div>The ECG signals can capture the heart's rhythmic irregularities, commonly known as arrhythmias. we propose a two-dimensional (2-D) convolutional neural network (CNN) model for the classification of ECG signals into eight classes; namely, normal beat, , paced beat, right bundle branch block beat, left bundle branch block beat, atrial premature contraction beat, ventricular flutter wave beat, and ventricular escape beat.</div></div>	<div>8.CHANNELS of BEHAVIOUR<div>CH</div><div>8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7</div><div>8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.</div><div><ul style="list-style-type: none"><li>Users need to upload of image of the ECG.</li><li>Patients need to undergo scan to get images of the heartbeat.</li></ul></div></div>	Identify strong TR & EM

#### 4. EMOTIONS: BEFORE / AFTER



How do customers feel when they face a problem or a job and afterwards?

i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

**Before:** The patients need to take an appointment with the doctor and wait for long time.

**After:** It is not required for the patients to wait for long time. If they have their ECG report, the work is almost done.