

# Project Title: Visualizing and Predicting Heart Diseases with an Interactive Dashboard

## Project Design Phase-I - Solution Fit Template

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Define CS, fit into CC	<div><div><div><b>1. CUSTOMER SEGMENT(S)</b></div><div>Who is your customer? i.e. working parents of 0-5 y.o. kids</div><div>CS</div></div><div>Hospitals Clinics Health Centers</div><div>E.g.: Doctors can use this along with the patients' medical data to analyze the risk of heart disease.</div></div>	<div><div><div><b>6. CUSTOMER CONSTRAINTS</b></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></div></div><div>Budget No accuracy in prediction Interactive Dashboards Network Connection Need of dataset</div></div>	<div><div><div><b>5. AVAILABLE SOLUTIONS</b></div><div>Which solutions are available to the customers when they face the problem</div><div>AC</div></div><div>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</div><div>Avoid smoking ,take healthy foods and proper medicine. Visit cardiologists in case of any symptoms and maintaining health diseases. Heart diseases prediction is done using machine learning techniques.</div></div>	Explore AS, differentiate
	<div><div><div><b>2. JOBS-TO-BE-DONE / PROBLEMS</b></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>J&amp;P</div></div><div>Visualizations give doctors very good insights on the potential chances for a patient to get heart disease. It is also very useful to explain to patients so that they can easily understand the risk factor and take care of themselves to reduce the likelihood of getting heart disease. Standard of Data: The outcome is fully depends on the accurate and relative dataset Visualizing and predicting heart disease.</div></div>	<div><div><div><b>9. PROBLEM ROOT CAUSE</b></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>RC</div></div><div>Smoking ,food habit and no physical strength Lack of exercise,obesity and smoking,Active aortic insufficiency(AI). A buildup of fatty plaques in the arteries (atherosclerosis) is the most common cause of coronary artery disease. Risk factors include a poor diet, lack of exercise, obesity and smoking. Heart diseases is hereditary. Some people may be leading unhealthy life which makes them more susceptible to heart related issues.</div></div>	<div><div><div><b>7. BEHAVIOUR</b></div><div>What does your customer do to address the problem and get the job done?</div><div>BE</div></div><div>i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering</div><div>Chest pain or discomfort, Shortness of breath, Slow heartbeat, Lightheadedness, Swelling in the legs, belly area or areas around the eyes. Unhealthy, stress and tiredness. Maintain a healthy weight, manage stress and good quality sleep. High blood pressure and high cholesterol can damage the heart and blood vessels.</div></div>	

<p><b>3. TRIGGERS</b> <span>TR</span></p> <p>What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.</p> <ul style="list-style-type: none"> <li>★ Patients who have a history with heart disease.</li> <li>★ Hospital and doctor suggestions.</li> <li>★ Need a specialist and less in cost.</li> <li>★ Stress and high pressure.</li> </ul>	<p><b>10. YOUR SOLUTION</b> <span>SL</span></p> <p>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.</p> <p>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.</p> <ul style="list-style-type: none"> <li>★ Heart disease can be affected because of various factors like smoking, high pressure etc.</li> <li>★ Heart disease has various factors like type of chest pain, type of heart disease.</li> <li>★ Heart disease treatment depends on the cause and type of heart damage.</li> <li>★ Healthy lifestyle habits such as eating a low-fat, low-salt diet, getting regular exercise and good sleep, and not smoking are an important part of treatment.</li> <li>★ Based on this, We can predict and analyze the disease and visualize it by using Dashboard.</li> <li>★ We are using a prediction method which uses various attributes for predicting the status of heart disease with the use of our machine learning model to predict the immediate results.</li> </ul>	<p><b>8. CHANNELS of BEHAVIOUR</b> <span>CH</span></p> <p><b>8.1 ONLINE</b> What kind of actions do customers take online? Extract online channels from #7</p> <p><b>8.2 OFFLINE</b> What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.</p> <ul style="list-style-type: none"> <li>★ <b>ONLINE:</b> Users look at the data and compare it with their test results. Upload data. Preparation and Exploration of data. Consulting the doctor at the right time if necessary to cure the heart disease.</li> <li>★ <b>OFFLINE:</b> Doctors use it as a tool to diagnose patients and make accurate predictions and the reasons for the cause of heart disease. Take the treatment at the right time to cure the heart disease.</li> </ul>
<p><b>4. EMOTIONS: BEFORE / AFTER</b> <span>EM</span></p> <p>How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure &gt; confident, in control - use it in your communication strategy &amp; design.</p> <ul style="list-style-type: none"> <li>★ Feeling afraid and depressed.</li> <li>★ Develop a feeling of awareness which means people.</li> <li>★ There is huge uncertainty in knowing the accurate and correct reason for a disease and predicting it.</li> <li>★ After deducting the problems the patient feels free and becomes healthy, taking the test that will feel relieved and they go for regular checkup and treatment.</li> </ul>		