PROJECT DESIGN PHASE-I
PROBLEM – SOLUTION FIT

Team ID:	PNT2022TMID14141
Project name:	Visualizing and Predicting Heart Diseases with an Interative DashBoard
Maximum marks:	2 marks

Problem – Solution Fit Template:

The Problem-Solution Fit simply means that we have found a problem with our customer and that the solution we have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why.

Purpose:

- Solve complex problems in a way that fits the state of your customers.
- Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- Sharpen your communication and marketing strategy with the right triggers and messaging.
- Increase touch-points with your company by finding the right problem-behavior fit andbuilding trust by solving frequent annoyances, or urgent or costly problems.
- Understand the existing situation in order to improve it for your target group.

Problem-Solution fit canvas 2.0

Purpose / Vision

1. CUSTOMER SEGMENT(S) — CS

Who is your customer?
i.e. working parents of 0-5 y.o. kids

People who are affected with heart diseases
People who want to keep upadte on their heart conditions

6. CUSTOMER CONSTRAINTS — CC

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.

Difficulty in finding a good doctor.
High maintenance costs.
It's not user friendly for remote village.
The shortage of doctors and nurses.
Lack of medical knowledge to oneself.

5. AVAILABLE SOLUTIONS — AS

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 & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking

Heart disease prediction is done using machine learning and data mining techniques. Learn how to perform analysis, visualizations and algorithms effectively.
It mainly aims to data mining techniques on medical datasets to achieve the heart diseases prediction.

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

To identify whether he/she is affected by heart diseases.
And also toassists in predicting diseases, analyzing symptoms, providing appropriate medicines, minimizing cost, extending the life span and reduces the death rate of heart patients.

9. PROBLEM ROOT CAUSE — RC

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.

Buildup of fatty plaques in the arteries is the most common cause of coronary artery disease.
Lack of exercise,obesity and smoking.
Acute aortic insufficiency(AI).
Heart disease is hereditary.
Some people may be leading unhealthy life syles which makes them more susceptible to heart related issues.

7. BEHAVIOUR — BE

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)

Maintain a healthy weight.
Manage stress.
Get good quality sleep.
High blood pressure and high cholesterol can damage the heart and blood vessels. But without testing for them, you probably won't know whether you have these conditions. Regular screening can tell you what your numbers areand whether you need to take action.

3. TRIGGERS — TR

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

Users male sure they are healthy.
Hospital and Doctor suggestions.

4. EMOTIONS: BEFORE / AFTER — EM

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 taking the test. the user feel negative emotions like anger, depression , anxiety,etc,.whereas after taking the test, thay will feel relieved and they will go for regular chekup and treatment.

10. YOUR SOLUTION — SL

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.

Heart disease treatment depends on the cause and type of heart damage. 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.
Our application helps user to find if they have haert disease or not based on details such as heart rate, cholestrol and bp.
A dashboard is also attached along with results for better understanding for prediction of heart diseases.

8. CHANNELS of BEHAVIOUR — CH

8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7

Online appointments with doctors..
Research about the heart disease they are diagnosed with. Research about natural cures.

8.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

Reach out nearest cardiologist.
Following the suggestions made by the doctors.
Taking the right doses of pills at the right time mentioned by doctors.

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