

## 1. CUSTOMER SEGMENT(S) CS

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

Our customers are the patients who are suffering from liver disease. Especially occurred due to the large amount of alcohol consumption. Currently, the liver related diseases are identified by analyzing liver function blood test reports and scan reports. It takes more time and is expensive as well. It is not sure that the accuracy of diagnosing the disease is best in existing solutions.

## 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.

The problems which we have encountered are

Accuracy --- The model should acquire required accuracy because it involves the risk of life of human beings.

Identify --- There are different kinds of liver disease and so our model should be able to predict all kinds of liver disease.

Risk Involved --- The model should be able to predict the level of risk that the patient currently have due to the diagnosed disease.

## 3. TRIGGERS TR

---People wants to make their life easier, as they can use it anywhere and anytime.  
---Now-a-days web application is the one which is easily accessible and doesn't require downloading of apps.

## 4. EMOTIONS: BEFORE / AFTER EM

---People find it difficult to trust the predicted results. So, our goal is to work on accuracy and change it.  
---People feel easier to access the application and can be able to diagnose the liver disease in their house itself and can ensure security of their records.

## 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.

-----Should have smartphones, tablet, laptop

-----Should have internet access

## 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

In early days, there was a traditional approach to diagnose liver disease by using algorithms like  
--Naive Bayes Classifier  
--Support Vector Machines  
--Back Propagation Neural Network  
--Decision tree  
--Random tree and so on.

But they are failed due to uncertainty in accuracy.

## 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.

The root cause of the problems are

--- Acquiring proper dataset is difficult.

--- Parameters used for the training and testing the dataset should be able to predict any kind of liver disease and risks involved if the person is diagnosed with the particular disease.

--- The model may require more real-time data to improve its accuracy and so there may be uncertainty in the predicted result at the start of the app released.

## 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)

----- People may stop using the application if the predicted results are not appropriate.

----- People may also try to use applications which has better response speed.

----- They avoid to use the predictors if it is not user-friendly.

## 10. YOUR SOLUTION SL

Our solution to solve this problem is to develop

----An application which is accessible from anywhere at anytime using their mobile/laptop/tablet.

----Try to develop the application with more accuracy.

----Try to develop the application with as many features as possible to give more benefits to the consumer.

## 8. CHANNELS of BEHAVIOUR CH

ONLINE

----People may be able to access the application in the browser from anywhere and at anytime.

----Advertise about the application with influencers to promote the application.

8.2 OFFLINE

--- Word of mouth among consumers (especially doctors).