**Project Title: Statistical Machine Learning Approach to Liver Disease Prediction Project Design Phase-I** - **Solution Fit Template Team ID:** PNT2022TMID26382

**Focus on J&P, tap into BE, understand RC**

**Explore AS, differentiate**

**Deﬁne CS, ﬁt into CC**

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

* Liver disease diagnosis can be made through any small clinics nearby or through the hospitals
* But in both the above cases, patient will wait for a longer period to get their test results during which the disease may get severe

**AS**

**5. AVAILABLE SOLUTIONS**

Which solutions are available to the customers when they face the problem

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.

* Elderly people cannot visit hospitals and medical centers frequently
* Patients need to wait for a longer period to get their test reports
* Liver disease diagnosis test is not affordable for poor people

**CC**

**6. CUSTOMER CONSTRAINTS**

**CS**

**1. CUSTOMER SEGMENT(S)**

Who is your customer?

i.e. working parents of 0-5 y.o. kids

* Patients facing symptoms of liver diseases like abdominal pain and swelling, itchy skin, etc.
* Elder people above the age of 60years
* Hospitals
* Liver Disease diagnosis centers.

**Explore AS, differentiate**

**Define CS, fit into CC**

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)

* Patient should consult the doctor if they have symptoms of liver disease.
* Patient want to follow liver disease diagnosis test on a monthly basis as per doctor’s consultancy.

**BE**

**7. BEHAVIOUR**

What does your customer do to address the problem and get the job done?

**RC**

**9. PROBLEM ROOT CAUSE**

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.

* Early diagnosis is beneficial in the treatment of disease
* People mostly hesitate to visit hospitals or they may not be knowing the severity of the disease

**J&P**

**2. JOBS-TO-BE-DONE / PROBLEMS**

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

* The solution should diagnose the affected level of liver quicky as possible
* Solution should generate a detail medical report

**Focus on J&P, tap into BE, understand RC**

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| --- | --- | --- | --- | --- |
| **Identify strong TR & EM** | **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.   * Understanding the severity of liver disease at later stage by undergoing some severe pains caused as a symptom of liver disease * Knowing the impact of liver disease through neighbors and friends | **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.   * The solution should give basic recommendation to the patients * The solution should generate the report for the patients for future use * The solution should automatically differentiate healthy and diseased patients just using the data | 1. **CHANNELS of BEHAVIOUR CH**     1. **ONLINE**   What kind of actions do customers take online? Extract online channels from #7   * 1. **OFFLINE**   What kind of actions do customers take ofﬂine? Extract ofﬂine channels from #7 and use them for customer development.   * Patients need to find the symptoms of liver disease * Patients want to consult the doctor and should follow diagnosis test to predict the liver disease and its severity * If the liver disease was predicted, patients should act accordingly to doctor’s advice |  |
| **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.   * Patients, without knowing that they have been diseased in a particular part of their body might unknowingly do things that are likely to increase the effectiveness of the disease * Patients will be very much cautious about not following some habits after knowing their body condition |