Project Title:

Exploratory Analysis of Rain Fall Data in India for Agriculture

Project Design Phase-I - Solution Fit Template

Define CS, fit into

1. CUSTOMER SEGMENT(S) — CS

- Farmers
- Agriculture Sectors
- Public
- Researchers
- Departments of the Government or NEWS organizations seeking rainfall forecasts

6. CUSTOMER CONSTRAINTS — CC

- To estimate the duration and volume of rainfall before hand and take decisions accordingly
- To get a prediction with highest accuracy
- Limited time to make use of digital devices to get the prediction information
- Unstable network connection
- Cost and Time limitation
- Customer can only access the given data prediction

5. AVAILABLE SOLUTIONS — AS

- A website exists which uses the previous data to predict the rainfall and various models are been developed.
- NEWS on weather forecasting.
- Prediction by the experts.

Explore AS,

Focus on J&P, tap into BE,

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

- Because of the long gap between rains, crops face water stress.
- Also short term crops vegetative phase would be cut short and they will go into early flowering, leading to a drop in yield.
- Sudden change in weather and immediate rainfall or Showers.
- Damage to crops due to heavy rainfall.
- There would be a difficult in the analysis of previous data.
- The data available in the real world are not most accurate.

9. PROBLEM ROOT CAUSE — RC

- Irregular rainfall in various regions of India
- Drastic variability in climate change
- Biodiversity loss
- Unpredictable weather
- Formation of cyclones in costal areas

7. BEHAVIOUR — BE

- Customers draw a petition to the Government to solve their problems.
- Online report submission system are available.
- They report to the experts in the field.

Focus on J&P, tap into BE,

Identify strong TR & EM

3. TRIGGERS — TR

- Evolving market competition and change in demand supply
- To predict weather to save water and plants

4. EMOTIONS: BEFORE / AFTER — EM

Before : Confused of weather and Frustration, Loss in profit
After : Satisfied, Gain in profit, More confident in cultivation

10. YOUR SOLUTION — SL

Build a web based application which uses the ML algorithm that predict the rainfall to the most accurate and to gather the pattern of the rainfall in major active agriculture cities.

8. CHANNELS of BEHAVIOUR — CH

ONLINE:

Receiving of online notifications on their network enabled devices.

OFFLINE:

Communication with farmers, Experts, Colleagues on deciding the agriculture activity.

Extract online & offline CH of BE