Project Title: Smart farmer-IoT enabled smart farming application
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Project Design Phase-I - Solution Fit Template

1. CUSTOMER SEGMENT(S)
Who is your customer?
Who needs to monitor the crops.

6. CUSTOMER CONSTRAINTS
What constraints prevent your customers from taking action or limit their choices of solutions?
Access to machines for land operations, Defines ability to irrigate as well as profitability.

5. AVAILABLE SOLUTIONS
Which solutions are available to the customers when they face the problem or need to get the job done?

Smart farming systems uses modern technology to increase the quantity and quality of agricultural products.

2. JOBS-TO-BE-DONE / PROBLEMS
Which jobs-to-be-done (or problems) do you address for your customers? It can help monitor agricultural land and soil moisture. This would enable farmers to monitor crops from anywhere. Moreover, smart farming can help integrated and digital physical infrastructure , which would benefit small farmers.

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?

Farmer are not available in 24 hours near the crop field. So, he needs to monitor the field to increase the yields.

7. BEHAVIOUR
Today's agriculture is in a race . Farmers have to grow more products in deteriorating soil,declining land availability and increasing weather fluctuation . IoT enabled agriculture allows farmers to monitor their product and conditions in real time .

3. TRIGGERS
What triggers customers to act? Many farmers are not using implements; hence they face low productivity and inefficient work. Nowadays , many inventions take place and many machines are launched into the market even though most of the farmers are not using implements for agriculture. Brands produce the best quality implements at a reasonable price range that the average farms can easily afford. For boosting productivity in the farms with effectiveness and efficiency than using a tractor implements are essential. Using tractor implements for your farms makes you as a smart farmer.

10. YOUR SOLUTION
Farmer needs to monitor the sensor parameters by using a web or mobile application even if the farmer is not near his field. Watching the crops is one of the important tasks for the farmers. They can make the decision whether to water the crops or postpone it by monitoring the sensors parameters and controlling the motor pumps from the mobile application.

8. CHANNELS of BEHAVIOUR
8.1 ONLINE
What kind of actions do customers take online?
Receive a message from Arduino.

8.2 OFFLINE
What kind of actions do customers take offline?
Monitoring the sensor parameters using various sensors .

4. EMOTIONS: BEFORE / AFTER

How do customers feel when they face a problem or a job and afterwards?

Before the farmer cope with climate change and soil erosion and biodiversity loss. After using smart farming this allows farmers to determine the best uses of scarce resources within their production environment and manage these in an environmentally and economically suitable manner.