**IBM Report (Nalaiya Thiran)**

**IOT based Smart Farming**

**SUBMITTED BY**

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**SOLUTION FIT**

**Project Title: Project Design Phase-I Team id:** PNT2022TMID23529

IOT BASED SMART FARMING **Solution Fit Template Name:** SOMANATH. S

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

**3. TRIGGERS**

* The two large tanks are used inside and outside the ground in which the natural water that is rain water is used for present and future use.

**4. EMOTIOMNS BEFORE & AFTER**

* Security is maintained.
* Work load is reduced.
* Proper installation.

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

* Water scarcity problem.
* Efficient usage of natural water.
* The animals invading will be prohibited
* Temperature and humidity level.
* Plants growth can be monitored.

**CS**

**1. CUSTOMER SEGMENT(S)**

* This project is mainly used to reduce the work load and mental illness of farmer.
* The irrigation system, plant monitoring system, temperature and humidity detection and animal.
* Monitoring 24/7 everyday.

**Explore AS, differentiate**

**Define CS, fit into CC**

**Explore AS, differentiate**

**Deﬁne CS, ﬁt into CC**

**7.BEHAVIOUR**

* Rain water monitoring is used.
* Farmer’s can view the crops in the system during its free time.
* Whenever there is emergency ab alarm beam will get activated and intimates the farmer.
* The water pump is used to transfer water from underground to the surface

**6. CUSTOMER CONSTRAINTS**

* Low budget.
* Automatic monitoring
* Reduced man power
* Reduce the farmer’s stress
* Rain water is effectively used

**J&P**

**5. AVAILABLE SOLUTION** past they have used only water monitoring, temperature.

* In our project we added rain water storing tanks, temperature & pressure sensor, PIR sensor in single assembly.
* In addition camera is used to monitor the plants growth

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **8.CHANNELS OF BEHAVIOUR**   * **ONLINE :** Nutrients of the plants, humidity, temperature, motion of animals through app. * **OFFLINE :** The equipments and components should be checked. | **9. PROBLEM OF ROOT CAUSE**   * Ground water scarcity problem is solved by using rain water. * Animal invading is prohibited. * Temperature & humidity is maintained. | **10. YOUR SOLUTION**     * The plant is monitoring 24/7 with less power. * The implementation cost is low. * The rare crops can also be grown. * Automatic monitoring without using man power. |  |