Problem-Solution fit canvas 2.0 Purpose/Vision

DefineCS,fitintoCC

1.CUSTOMER SEGMENT(S)

Farmers and Peoples.

6.CUSTOMER CONSTRAINTS

Fertilizers replace the nutrients that crops remove from the soil. Without the addition of fertilizers, crop yields and agricultural productivity would be significantly reduced. That's why mineral fertilizers are used to supplement the soil's nutrient stocks with minerals that can be quickly absorbed and used by crops.

5.AVAILABLE SOLUTIONS

This work presents the architecture of smart agricultural systems based on contemporary IoT communication technology, AI, and Wireless Networks.

AI-based IoT applications to boost crop yield competitiveness and sustainability.

More agriculture sensors can be integrated to build a complete framework to manage all farming activities in future work.

ExploreAS,differentiate

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2.JOBS-TO-BE-DONE / PROBLEMS

- The ingredients in the fertilizers are toxic to the skin and respiratory system.
- Excessive use of fertilizers damages the plants and reduces soil fertility.
- Leaching occurs and the fertilizers reach the rivers causing eutrophication.

9.PROBLEM ROOT CAUSE

Root Cause Analysis supported by input from the problems-sufferers, instruction manual studies, comparing design and actual operating data, gathering knowhow from relevant literature, tech journals articles and advertisements especially on new products.

7.BEHAVIOUR

Understand this decision-making process, the study attempts to assess the farmers' fertilizer use behaviour using a socio-psychological model based on available resources, prevailing socio-economic conditions and personal aspects of users in Uttar Pradesh region of India.

This research work suggests the need for site-specific tailor-made policy measures which can be instrumental in mitigating environmental externality resulting from mismanaged farm practices like excessive use of fertilizers.

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IdentifystrongTR&EM

3.TRIGGERS

Fertilizers work by providing essential nutrients to developing flowers, trees and veg, as a kind of multi-vitamin or meal replacement for the plant world. Many fertilizers also improve the way the soil works by helping it to retain water better and allowing air to flow freely, which is good for roots.

4.EMOTIONS: BEFORE /AFTER

Without fertilizers, nature struggles to replenish the nutrients in the soil. When crops are harvested, important nutrients are removed from the soil, because they follow the crop and end up at the dinner table. If the soil is not replenished with nutrients through fertilizing, crop yields will deteriorate over time.

10. YOUR SOLUTION

- Implement Smart Irrigation System for farms to get higher yield.
- Crop diseases detection using image processing in which user get pesticides based on disease images.

8.CHANNELS of BEHAVIOURS

8.1 ONLINE

Online portal for making recommendations for a fertilizer based on soil parameters using Machine Learning.

8.2 OFFLINE

During offline , it affect the image preprocessing of noise filter using medium filter, segmentation of boundary extraction for disease prediction.

Extractonline&offlineCHofBE