

Define CS, fit into	1. CUSTOMER SEGMENT(S) <ul style="list-style-type: none"> Farmer's requirement to protect crop from damage from the external world CS	6. CUSTOMER CONSTRAINTS <ul style="list-style-type: none"> Lack of human resource Limited supervision Limited finance CC	5. AVAILABLE SOLUTIONS <ul style="list-style-type: none"> CCTV camera to monitor the crops Alarm system to drive away the animals AS	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS <ul style="list-style-type: none"> No proper irrigation to crops Improper maintenance of crops Lack of knowledge among farmers in using fertilisers Requires protecting crops from wild animals, birds and pests J&P	9. PROBLEM ROOT CAUSE <ul style="list-style-type: none"> Due to insufficient labour force Due to high ammonia, urea, potassium and high ph level Due to various environmental factors such as temperature, climate, soil quality which results in crop destruction RC	7. BEHAVIOUR <ul style="list-style-type: none"> Consumes more time in cropland Searching alternate solution Ask suggestion from surrounding people BE	

3. TRIGGERS <ul style="list-style-type: none"> By seeing surrounding cropland installing machines Knowing about technologies and its effective solution TR	10. YOUR SOLUTION <ul style="list-style-type: none"> Moisture sensor interfaced with arduino to measure the moisture level in the soil and relay issues to turn on and off the motor pump for managing the excess water level. It will be updated to the authorities through iot Temperature sensor connected to Arduino issued to the monitor the temperature in the field The optimum temperature required for crop cultivation is maintained. lot based fertilizing method are followed to minimize the negative effects of the growth of crops Image processing technique with iot is followed for crop protection against animal attacks SL	8. CHANNELS of BEHAVIOUR 8.1 ONLINE <ul style="list-style-type: none"> Using different platforms to describe the working and uses of the smart crop protection device. CH
4. EMOTIONS: BEFORE / AFTER <ul style="list-style-type: none"> Felt happy that there is a technology with minimum cost to the problem No more stress about production of crops EM		8.2 OFFLINE <ul style="list-style-type: none"> Giving awareness to farmers about the application of the device

