6. CUSTOMER LIMITATIONS EG. BUDGET, DEVICES CL 5. AVAILABLE SOLUTIONS PLUSES & MINUSES • Automation in irrigation. xplore AS, differentiate 1. CUSTOMER SEGMENT(S) Define CS, fit into Farmers who trying to protect crops •Limited supervision. •CCTVcamera tomonitor and nsupervise from various problems Limited financial constrains. thebcrops. · Lack of manpower. Alarmnsystem to give alert while animals attacks the crops. PR 9. PROBLEM ROOT / CAUSE 7. BEHAVIOR + ITS INTENSITY 2. PROBLEMS / PAINS + ITS FREQUENCY • Due to in sufficient labourforces Cropsarenotirrigatedproperly. •Asks suggestions from surrounding Due to various environmental factors peoples and implement there cent Improper maintenance of crops. technologies. such as temperature climate, to Lack of knowledge among farmers Consumes more time in cropland. pography and soilquality which results inusage offertilizers and hence crops Searching for an alternative solution for incrop destruction. are affected. • Due to high ammonia, urea, anexistingsolution. • Requires protecting crops from Wild potassium and animals attacks, birds and pests. highPHlevel_{fertilizers}. SL CH TR 10. YOUR SOLUTION 3. TRIGGERS TO ACT 8. CHANNELS of BEHAVIOR ONLINE Using different platforms/social media Moisture sensor interfaced withArduinoMicrocontroller to By seeing surrounding cropland with Extract online & offline CH of BE to describe th eworking and uses of measure the moisture level in soil and relay isused toturn ON and installing machineries. OFF the motorpump for managing the excess waterlevel. Hearing aboutinnovativetechnologies smart crop protection device. It will be updated to authorities through IOT. and effective solutions. Temperature sensor connected to microcontroller is used to monitor the temperature inthe EM temperature required for crop cultivation is maintained using OFFLINE 4. EMOTIONS BEFORE / AFTER IOT basedfertilizingmethodsare followed, to minimize the Mentalfrustrations due to insufficient Giving awarenes among farmers about negative effects on growth of crops while using fertilizers the application of the device. production of crops. Felt smart enough to follow the available Image processing techniques with IOT is followed forcrop technologies with minimum cost. protection agains animalattacks.