Project title: Emerging Methods for Early Detection of Forest Fires

Explore AS, differentiate 1. CUSTOMER SEGMENT(S) 6. CUSTOMER CONSTRAINTS CC 5. AVAILABLE SOLUTIONS AS CS Forest officer Satellites allow for detecting and monitoring a range of fires, providing information about the Common people location, duration, size, temperature, and Avoid burning wastes around dry grass. fit into Obey local laws regarding open fires, including campfires power output of those fires that would Have firefighting tools nearby and handy. otherwise be unavailable. Satellite data is Use fire resistant roofing materials. undertake technical checkups regularly. also critical for observing and monitoring Monitoring weather analytics, smoke from the fires. monitoring thermal anomalies, monitoring water stress and temperature rises. J&P 2. JOBS-TO-BE-DONE / PROBLEMS 9. PROBLEM ROOT CAUSE RC 7. BEHAVIOUR BE Satellite remote sensing offers a useful When the people don't have knowledge Forest fires cause lots of damage, some of tool for forestfire detection, monitoring, them are - loss of wildlife habitat. about forest fire management and damage assessment. extinction of plants and animals, destroys During a fire event, active fires can be the nutrient rich top soil, reduction in forest detected bydetecting the heat, light and cover, loss of valuable timber resources, smoke plumes emitted from the fires. ozone layer depletion, loss of livelihood for This applicationuses real-time satellite tribal people and poor people, increase in data to detect and monitor forest fires global warming. (sending alerts to mobile devices), and understand fire patterns. TR SL СН 3. TRIGGERS 10. YOUR SOLUTION 8. CHANNELS of BEHAVIOUR Human-caused fires result from campfires left For this problem we use image processing and Identify strong TR & EM unattended, the burning of debris, equipment video analysis so by using satellite image ONLINE: fire alert sensor use and malfunctions, negligently discarded processing we can able to find the fire at the cigarettes, and intentional acts of arson. early stage and stop spreading fire in the forest. This model is mainly build by using CNN and OFFLINE: Fire awareness program machine learningand deep learning EM 4. EMOTIONS: BEFORE / AFTER unsafe and worries about lives and Before: belongings ; safety and relief After

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