Define CS, fit into

<u>Project Title:</u> Emerging methods for early detection of forest fires

Project Design Phase-I - Solution Fit Template

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1. CUSTOMER SEGMENT(S)

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Foíest guaíd

2. JOBS-TO-BE-DONE / PROBLEMSEP

Always cleaí the aíea aíound the woíkspace.

l'he aíea should be even laígeí if it is windy and díy.

Making suíe that to neveí opeíate equipment that píoduces spaíks neaí díy vegetation.

6. CUSTOMER CONSTRAINTS

Spending moie money foi the equipments, netwoik connection foi the devices, poweisupply inteiiuptions, occuiience of damages sometimes these limitations the customeis choicesof solutions.

9. PROBLEM ROOT CAUSE



1 he fife is mainly caused by lightning, increased temperature, human activities and other feasons.

Human caused fiíes íesult fíom campfiíes, equipmentuse and malfunction, negligently discaíded cigaíettes, etc..

5. AVAILABLE SOLUTIONS

Alaím system foí indication of five, íemote sensing based methods such as satellites, high -íesolution static cameías fixed on the gíound, unmanned aeíial vehicles.

7. BEHAVIOUR



l'hey to monitoí the foíestaíeas themselves, often checkingwhetheí the camp fiíe aíe put off píopeíly.

Always having fiíe fighting tools always íeady.

Monitoiing the tempeiatuie in the foiest.

3. TRIGGERS

l'he need to píotect the wildlife and themselves tíiggeís them to act.

Not knowing when would fife stafts

1°aking suggestion fíom visitoís.

4. EMOTIONS: BEFORE / AFTER

l'hey don't feel safe. Always feaí of catching fiíein the foiest.

Panic at the of sudden foíest fiíe.

Afteíwaíds:

l'hey will have some satisfaction of knowing that some indication will come on the stait of fiie.

10. YOUR SOLUTION

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ΕM

l'he computeí vision methods foi iecognition and detection of smoke and fife, based on the still images of the video input fíom the cameías.

Deep leaining method 'convolution neuíal netwoík" can be used foi finding the amount of fiie.

Enabling the video suíveillance systems on foíest to handle moie complex situations in íeal woíld.

8.CHANNELS of BEHAVIOUR

Online:

SL

Installing cameías and sensoís in paíts of the foíest and checking the situation.

Offline:

Making suíe that no fiíeis staíted neaí the díy plants oí highly inflammable objects.







