TECH MONK AUTOMATION

POWER OUTAGE INFO MODULE

Ministry/organization- AICTE MIC

PS No.- IC463

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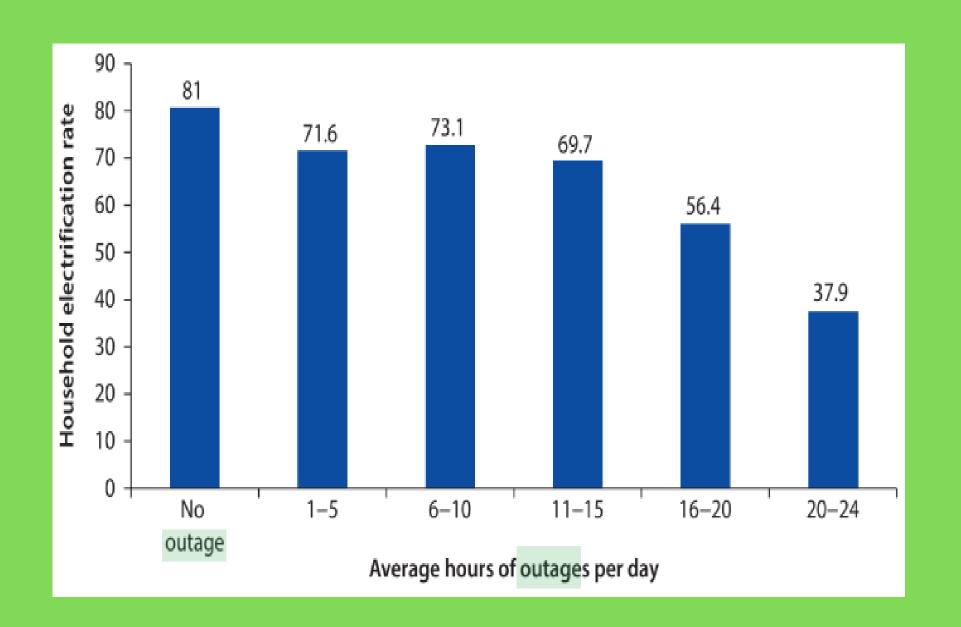
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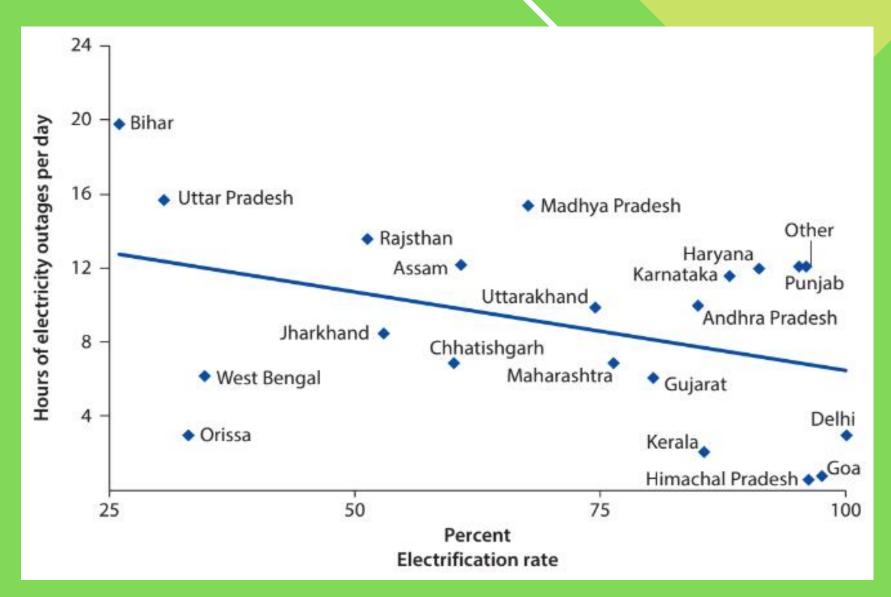
CURRENT SCENARIO

- --In developing countries like INDIA, Low Tension (LT) power distribution systems is not effective in terms of power outages. Thus leaving millions of customers with little or no options when their power outage happens.
- --Currently, consumers have to call up the Control Room to report a supply outage, for the agents to react and mobilize fixing team for repair. If sufficient consumers choose to report a power outage within quick succession, it may prompt the Agent to think that power outage happened, or fuse blown and consequently it directs the fixing team accordingly.
- --However, if this consumer response is not forthcoming, the field crew has to carry out trial and error inspections to locate the damaged transformer or junction box, resulting in a considerable delay in repair.
- --Furthermore, a delay in knowing that an outage has occurred, from consumer phone calls, delays
 the overall restoration time.



CURRENT SCENARIO





Lack of a reliable electricity supply is not just an inconvenience; there is a direct correlation between the extent of power outages and a village's household rate of grid electricity adoption.

In view of the **increasing inconvenience** due to the manual procedure, an automated system for monitoring the power cuts or outages needs to be established. This gives rise to the development of 'Power Outage Info Module

Problem

On low tension transmission,

The manual procedure of power outage info is outdated and time-taking.

Also monitoring of transformers' health in real time is still a challenge.

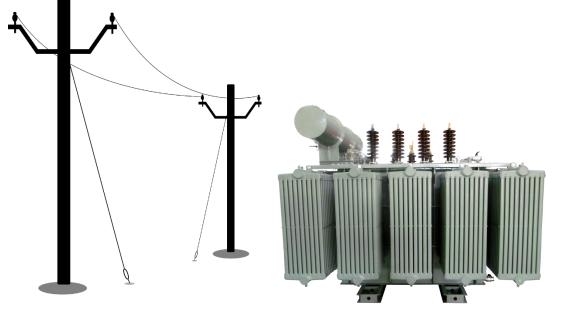
SOLUTION

: POIM (POWER OUTAGE INFO MODULE)

A Power Outage Info module has been invented, designed and developed, which senses electricity supply outages at strategic "nodes" of the Low-tension distribution network. It relays the information back to the Control Room within seconds of occurrence for the Management to take necessary corrective/preventive measures. Not only does the module match the technical requisites, but also, is economic enough to meet the shoestring budgets of the ailing utilities.



Flowchart of working of POIM



RBY (3 phase) Connected to main line in series
On POLES and TRANFORMER

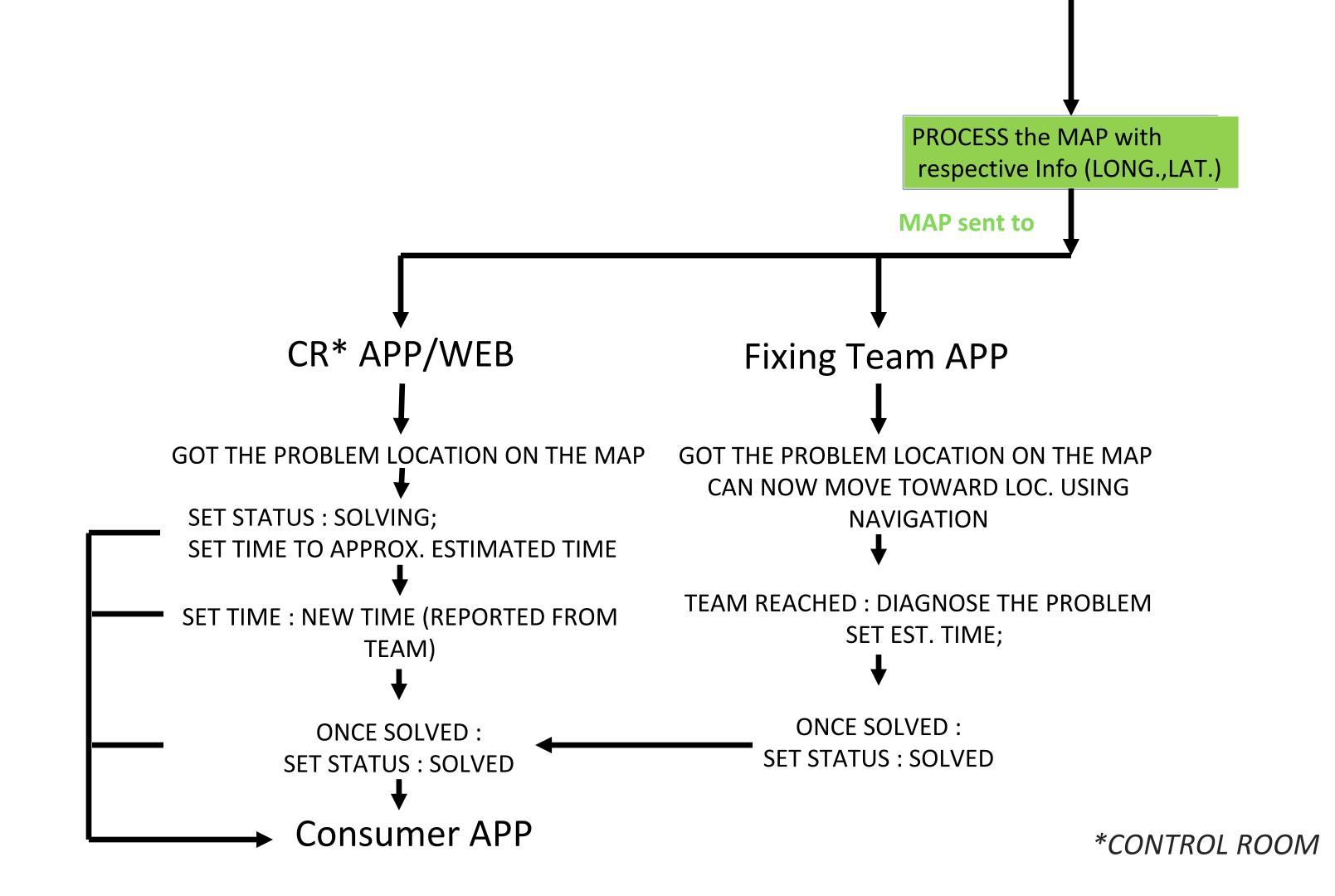
POIM Hardware Module If there is electricity in lines then **MODULE - OFF**

If there isn't any electricity in lines then **MODULE - ON**

Signal SENT
IN FORM OF
MESSAGE
CONTAINING
UNIQUE CODE



PROCESS the info, And take the matching Latitude and longitude



#thankyou