**PROBLEM SOLUTION FIT**

* The earlier results observed from the continuous monitoring of the temperature sensors selected included the decision of incorporating which sensor into the sensor node.
* Once the input image from the vedio frame is sent to the model if the fire is detected it is showcased on the console and alerting sound will be generated and an alert message will be sent to the authorities.
* We classify images using a convolutional neural network and use other open CV tools.
* The outputs of all these sensors were monitored simultaneously to check the accuracy of these sensors for inclusion in the development of the node.
* From the results it was evident that SHT15 showed output much closer to the Hygrometer 1620 by Fluke both in terms of temperature and humidity, so SHT15 was considered to be the best choice for sensing temperature and humidity in the sensor node.
* In the second part of experiment analysis, the sensor node was tested in the simulation chamber and artificial environment of forest fire was created by setting up fire from the dried leaves, small dried tree branches and paper bits. Here the parameters monitored included Temperature, Humidity, Smoke, Methane, and Carbon Monoxide.

**NOVELTY:**

Makes use of real time monitoring and allows pre-cursors potential issues to be flagged up and immediately be addressed before m major issues occur.

**BUSSINESS MODEL:**

Focuses more on sensor probes, wireless sensor network and machine learning which makes the deployment more easier.

**FEASIBILITY OF SOLUTION:**

* Cost effective
* Accurate
* Reliable
* Economical