

INNOVATION

AIR QUALITY MONITORING

Air quality monitoring using IOT has seen significant innovation and advancements in recent years. Some new innovation are... ,

(i) Sensor Technology:

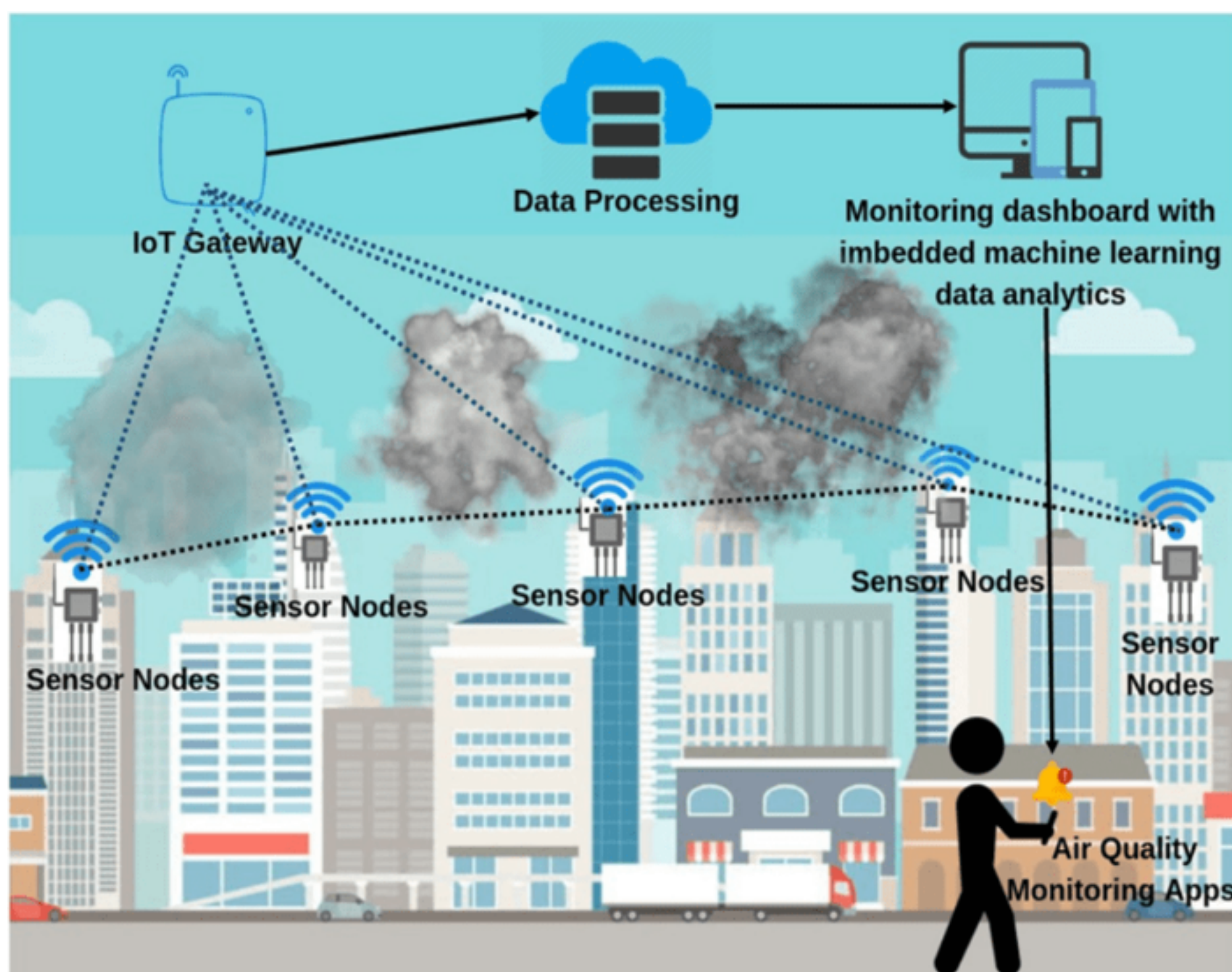
- * Miniaturized and cost effective air quality sensors have become widely available , enabling real-time monitoring of various pollutants such as PM2.5, PM10, NO2, CO and VOCs.

- *Particulate matter, Gas sensor, Photoionization detector are the sensor can be integrate into IOT devices for continuous data collection.

(ii) Data Analytics:

- * Advanced data analytics and machine learning algorithms are being used to process and analyze the vast amount of data generated by IOT sensor.

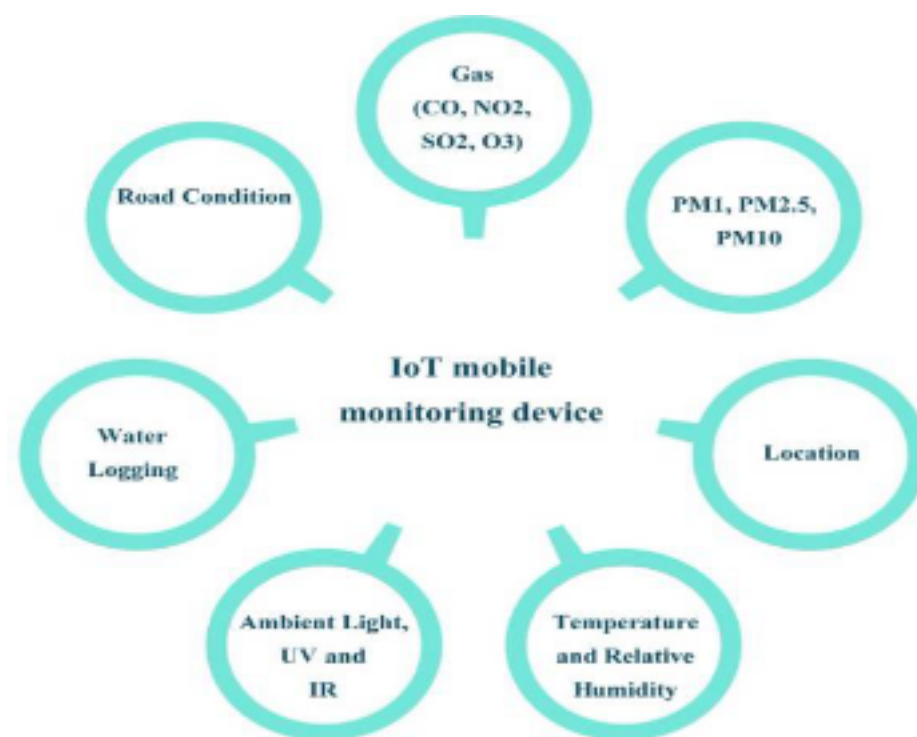
- *This helps in identifying trends, patterns, and sources of air pollution.



(iii) Mobile Apps:

* Mobile apps and web platforms are being developed to provide users with real-time air quality information .

*These apps often offer location-specific data ,health recommendation and pollution fore casts.

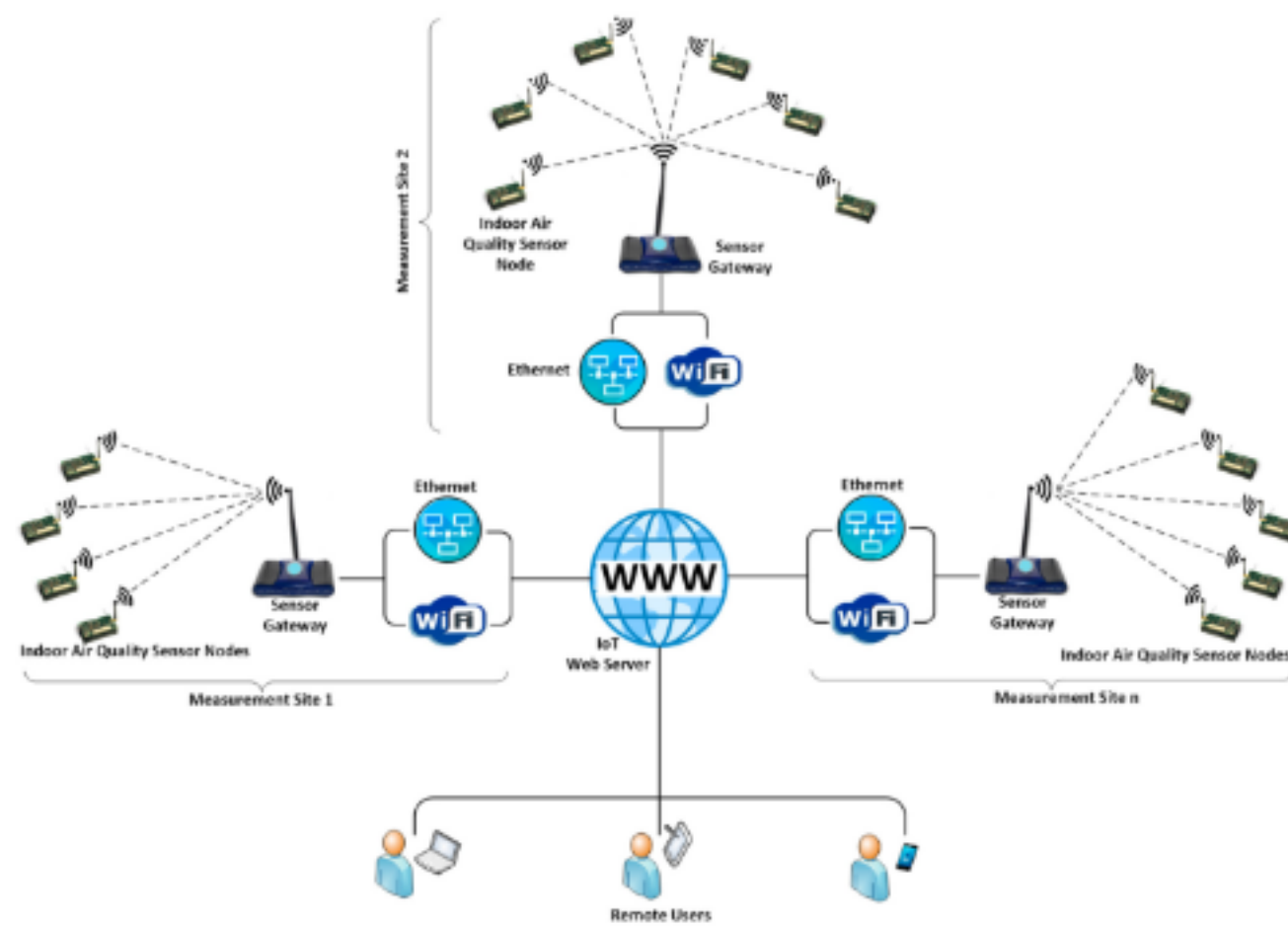


(iv) Wearable Technology:

Wearable devices with built-in air quality sensors can provide real-time feedback on personal exposure to pollutants, allowing individuals to take preventive measures.

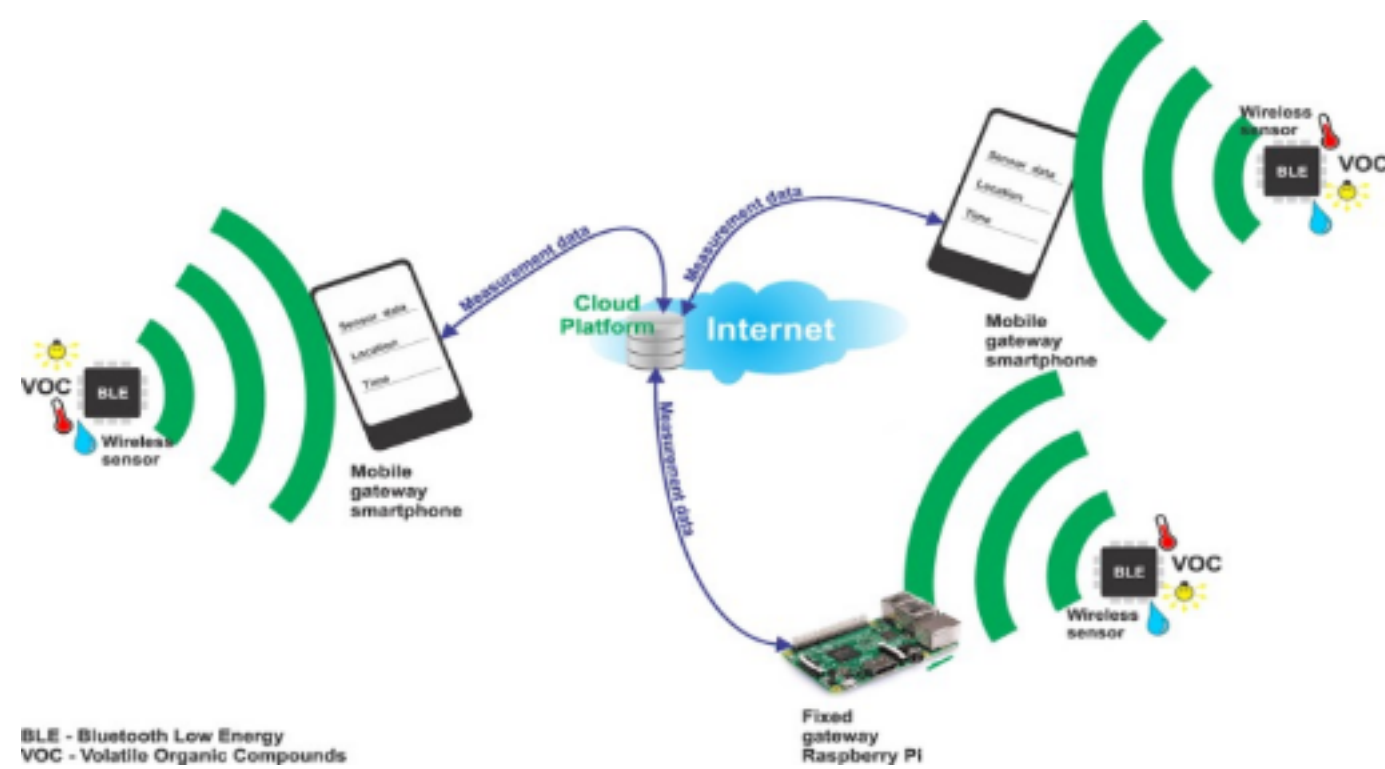
(v) Indoor air quality :

IOT device are also used to monitor indoor air quality in homes, offices and schools. These systems help users maintain healthier indoor environment.



(vi) Air pollution control:

IoT based systems can be linked to control mechanisms such as air purifiers and ventilation systems to automatically improve indoor air quality when pollution levels rise.



(vii) Environmental sustainability :

IoT based air quality monitoring contributes to environmental reducing pollution and enforcing regulations.