**WATER MANAGEMENT SYSTEM**

**Abstract:**

Water is one of the fundamental resources that aid life and there are speculations that estimate at

2025 almost half of the urban population will live under short supply and water stress. With the

usage of new technological advancements in IoT (Internet of Things) powered smart devices for

water management, it can become a worthy implementation towards avoiding the predicted

water depletion. In the past years up until recently, water monitoring and management were

manually carried out with intensive power requirements and high capital expense with low

efficiency recorded. Overflow of water overhead tanks in residential, commercial, cooperate and

educational settings, as well as broken pipes resulting in spillage, contribute to wastage at large.

Regular reservoirs for water cannot monitor nor give analytics and automated water level

detection in the tank. Vandalization or transmission blockages on distributions pipes may take so

long to discover. The proposed model addresses problems mentioned above by the application

of portable smart systems with interoperability and easily configurable to handle automated

management of water supply with energy efficiency and a reduction in power cost in both homes

and enterprise environment within smart cities as well as reduction of the rate of building

degradation as a result of overflow from overhead tanks. Our model also integrates the

application of Natural Language Processing for speech recognition as an alternate medium useful

in operating the system.

Keywords:

Internet of Things (IoT), Sensors, Smartphones, Transmitter, Wireless networks, Water

management, Overhead tank.