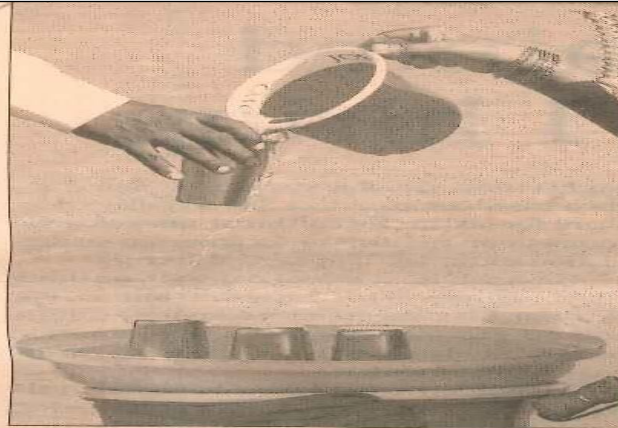




● WATER QUALITY
MANAGEMENT SOLUTION

IoT based tech to monitor water quality

Swatchpaani, developed
jointly by IBM and
IIITM-Kerala supports
real-time data analysis

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THE CONVENTIONAL METHOD of testing water quality is time consuming and inaccessible to most people. IBM, which is at the forefront of developing cognitive computing with IBM Watson, is making a concerted attempt to change that. It has joined hands with the Indian Institute of Information Technology and Management-Kerala (IIITM-K) to develop a real-time water quality management system—Swatchpaani. The new system claims to be faster, cheaper and more accessible than conventional methods of testing water samples.

Swatchpaani, which is based on IBM's Watson Internet of Things (IoT) technologies, will continuously monitor water quality and measure temperature, pH and the presence of various metal/non-metal substances in the water, to ensure standard levels as prescribed by agencies are not exceeded.

The water quality management system will comprise Libelium's signal conditioning boards and sensors and Raspberry Pi for connecting these to IBM Bluemix Cloud services and Watson IoT platform for device and sensor data management, analysis and visualisation. The system supports a data analysis in real-time and trigger alerts if there are anomalies in the water samples. The project will also incorporate a pre-screening mechanism to test the water quality of mobile water distribution systems.

"Swatchpaani offers a convenient, mobile, quick and cost-effective solution for the pre-screening of water samples. The extensive lab tests may be mandated only when the pre-screening signals a potential threat," said Asharaf, principal investigator, Swatchpaani Project, IIITM-K.

IBM officials said that the Watson IoT platform is a scalable solution which provides integration with various IoT devices to build specialised, integrated solutions to solve industry and business challenges. The Swatchpaani project is one such result on Watson IoT. "IBM India continues to work with academia to create useful and meaningful innovation based on Watson technologies," said Devkant Aggarwal, manager, university relations, IBM India.