CASE STUDY

VENAQUA IN A CAMPUS

We installed VenAqua in the premises of a one of India's top technology company. They hire tens of thousands employees across the country. Once hired, the employees undergo training at various residential campuses nationwide. With the rising shortage in water, the objective was to identify a solution to manage the water consumption in the residences and to implement a system that enables reduction in water consumption.
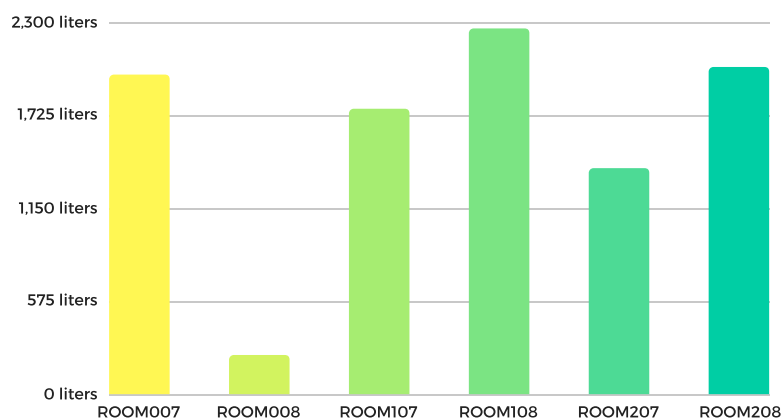
THE PROBLEM

Lack of an effective solution to track water consumption on a micro level at every inlet and provide real time data that promotes water conservation.
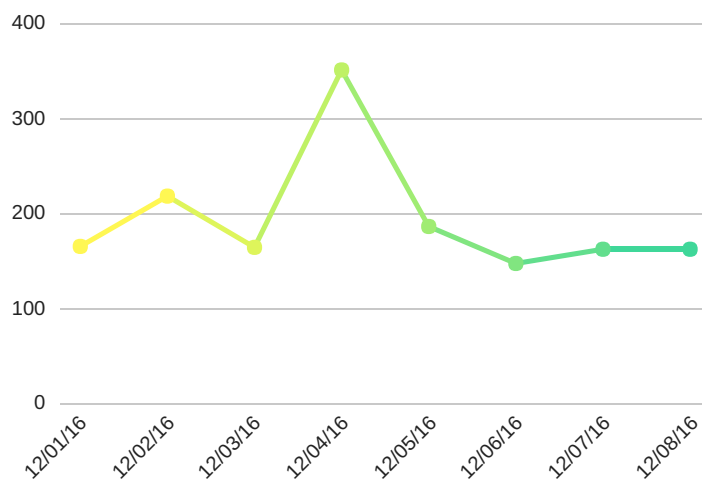
EXISTING SOLUTION

Flow meters are currently installed at the water source of every building. While these meters will give you information about how much water is being consumed by the entire building, information about individual consumption, leakages, open taps and other water saving inputs based on history and consumption patterns will not be available.

WEGOT SOLUTION

VenAqua, a sensor based IoT solution, is an end to end water management system that captures information in a multi-inlet plumbing layout and provides the end user with real time information. The information includes minute-by-minute consumption details; alerts (over usage, leak detection, open taps and predictions) based on historical data and consumption patterns of other residents on the campus. Additionally, VenAqua also provides the option to remotely shut off the supply of water in case of any alerts.

With VenAqua, the maintenance team could identify which room used to most water.

Day-to-day consumption levels of each room. The above graph depicts the water consumption of a single room.

ABNORMAL USAGE

Day wise consumption of user is compared against user's average.
Alerts are raised if higher than normal usage detected.
This is different from high user who consistently uses more than others.

OPEN TAP ALERT

An alarm will be raised every half hour of continuous water flow
- Visual indication on user dash-board
- Automatic email alert to the facility team
Observation : In the first 3 months of installation, VenAqua alerted leakages & open taps on 20 different occasions potentially saving 20,000 litres of water.

PLUMBING BYPASS ALERT

Data tracked and analyzed to detect plumbing line diversion of WTP into STP inlet.
Observation :In one of the room there was a bypass found during our testing. Maintenance team rectified it after we notified them

TAP & SHOWER EFFICIENCY

VenAqua identified high flowing taps/showers within a month of installation & the company was able to reduce thousands of litres of potential wastage by changing the faulty fittings.

REPORTS

- Usage Log
- High Usage
- Abnormal Usage
- Open Tap Alerts
- Plumbing bypass detection
- Tap/Shower efficiency
- Hot water usage
- Flush tank level optimisation
- Water usage by maintenance team
- Occupancy Report

WEGOT STATISTICS

6150+
Homes

8900+
alarms raised

60 million+
litres of water saved

CONCLUSION

After successfully installing VenAqua in the Residential blocks of the Campus, the Administrator could obtain data in all the rooms of every block and also view alarms raised against each room.
The Daily / Weekly / Monthly usage reports helped in understanding the usage pattern and capture seasonality.
This information helped in reducing the water consumption by 40% within the residential blocks of the campus.