gnarus Solut!ons

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Gnarus is a *Latin* word; in English, Gnarus means **being aware of** or **having knowledge of a thing** or **knowing**

@ **gnarus Solut!ons**, we are on a mission to bring awareness and help people knowing about several chores and things that matter in their day to day life and take appropriate action

the Internet of Things (IoT) today offers limitless possibilities for building solutions to solve challenges faced in day to day life. Team gnarus is building innovative products and solutions in this space, to create a simple & smarter life for its customers

gnarus Solut!ons mentioned in IIMB's contemporary concern study "*Internet of Things An Indian Outlook*".

gnarus Solut!ons an *exhibitor* in Startup Exchange, IoTAsia 2017, Singapore

member of

StartHubs AsiaBerlin
starthubs.info

Global Startup Ecosystem
globalstartupecosystem.com

partner of *Global Action on Poverty*
http://globalactiononpoverty.org/

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waterSenz^{TM} – water availability management
Save Water, Monitor Availability Of Water, Automatic Control of Water Pumps, Automate Tanker Supply Request, Enable Periodic Maintenance
patent pending

motion sensing based lighting
Automated Lighting Based On Ambient Conditions, Energy saver
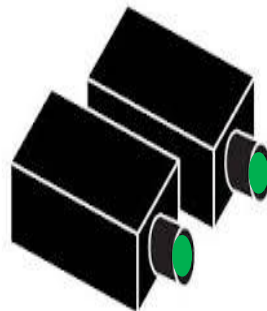
safeSenz for Mechanical Presses
Ensures operator Safety, Provides Visibility To Productivity, Increases Operator Efficiency

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full stack IoT development
Design & Developing of IoT Devices, Cloud & Mobile

electronics design
Firmware, Electronics Circuit Design, Pcb Design And Assembly
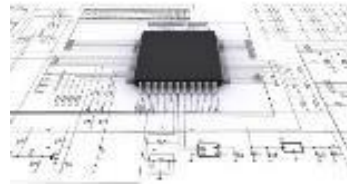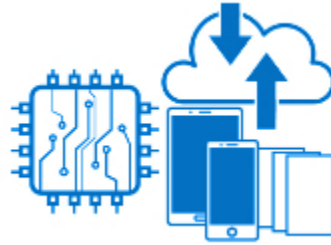
software product development
Custom Product Development, Application Development & Support

mobile apps
Native App Developments For iOS, Android, Windows
Platform independent apps

incubation
Partner with Gnarus to co-innovate and or incubate your ideas

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waterSenz™
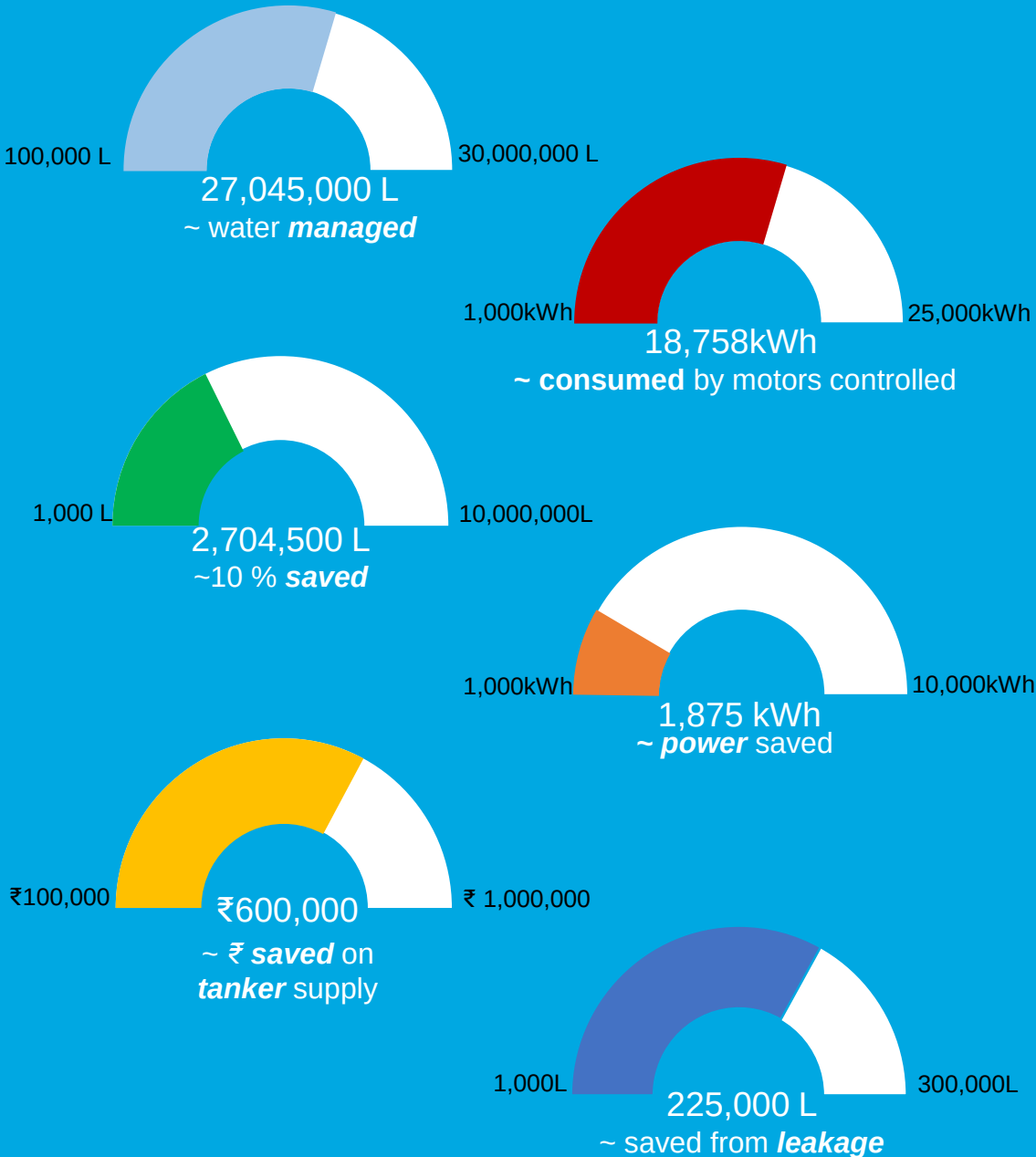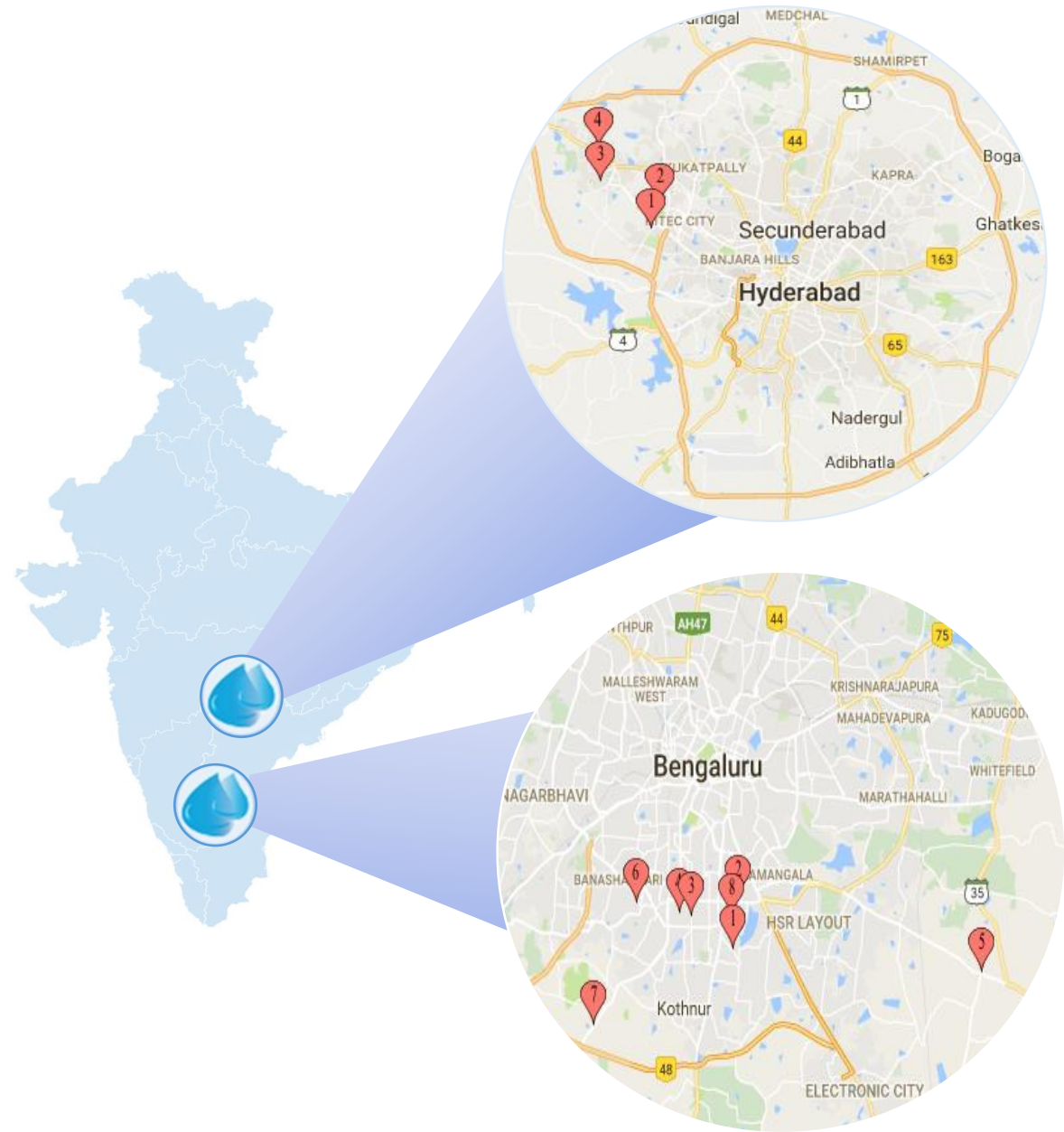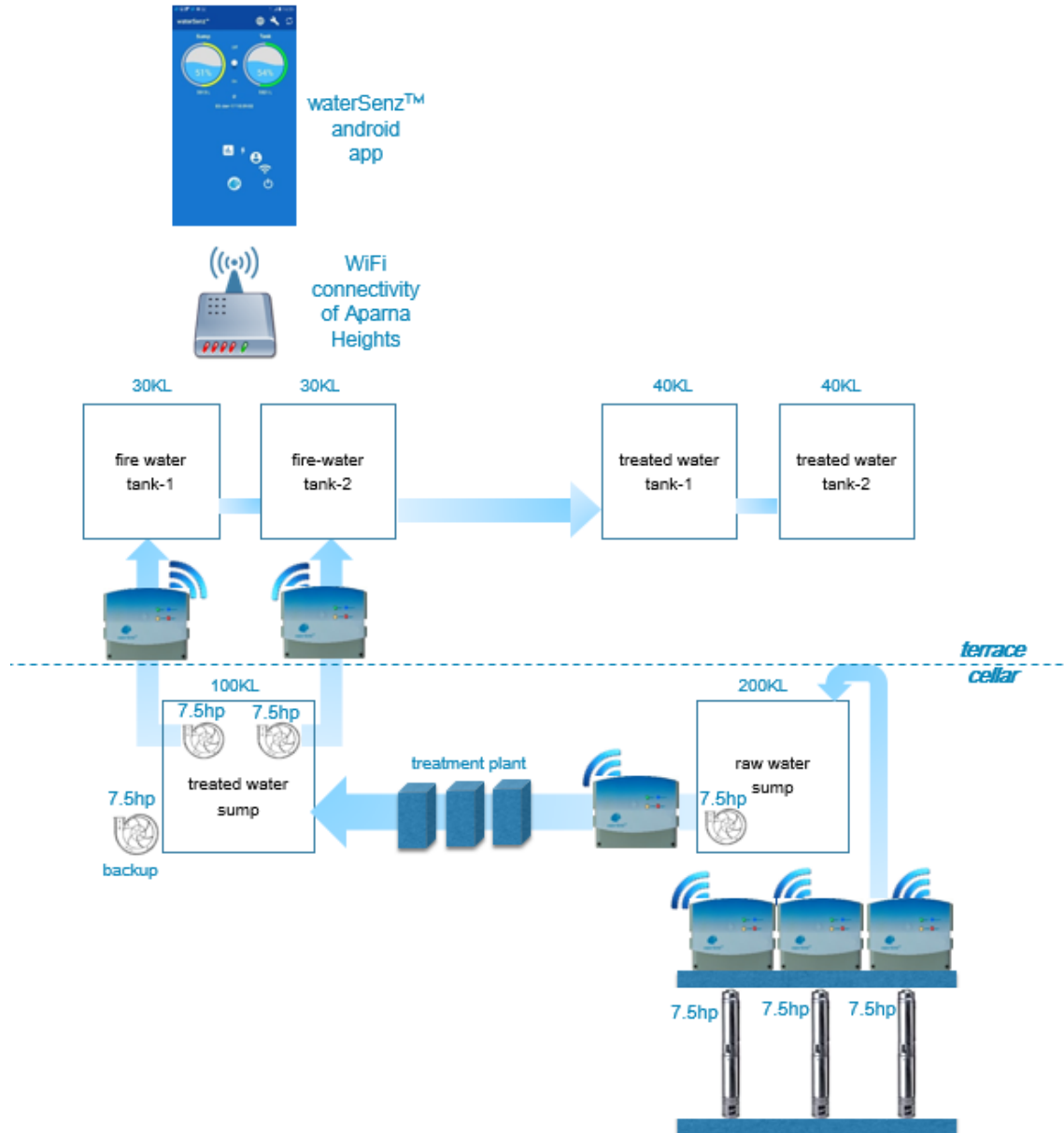
an integrated water management solution for small to large residential and commercial complexes. It combines contact-less sensors, wireless connectivity and cloud-hosted software, all orchestrated for simple deployment

Application:
- Municipal water management solution
- Bore well water management solution
- Sewage water treatment management solution

Product Variants
- Single device with monitoring and/or controlling unit
- Multi-device monitoring and controlling device (custom designed)

waterSenz™ exhibited in IoTAsia 2017, Singapore

waterSenz™ discussed in IIMB's contemporary concern study "*Internet of Things An Indian Outlook*".

Award Nominee - Outstanding Product or System Development in Automation

waterSenz™ featured in Surge 2016, Bengaluru

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waterSenz™ benefits

On/off control

Value added Services

Multi-language

Alerts & Notifications

Scheduler

Monitoring

Analytics

App display: waterSenz™ — Sump 68% 1853 L — Tank 82% 441 L — 03-Sep-16 20:44:16

patent pending

operations

- automate water pumping
- arrest overflows from Overhead tank
- optimize power usage for pumping
- optimize labour
- motor was RUNNING & power fails, waterSenz™ turns-ON the motor AUTOMATICALLY once the power resumes
- SCHEDULE motor-run besides automated
- optionally, control motor from waterSenz™ Android App
- periodic alerts for services such as tank/sump cleaning, motor service, etc.

monitoring

- see water levels near-real-time on waterSenz™ Android App
- if you are dependent on water tankers, you will get to know about re-fill need in sump even when you still have 10% reserve
- understand approximate water utilization from overhead tank

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waterSenz has made my Mother-in-law's life simple. Every day now she doesn't have worry about switching on the pump and stopping it. Saving water overflow is an added bonus.
I love the technology used and the fact that I can check the water consumption analysis on a daily and a weekly basis.
Thank you team for making this happens to us

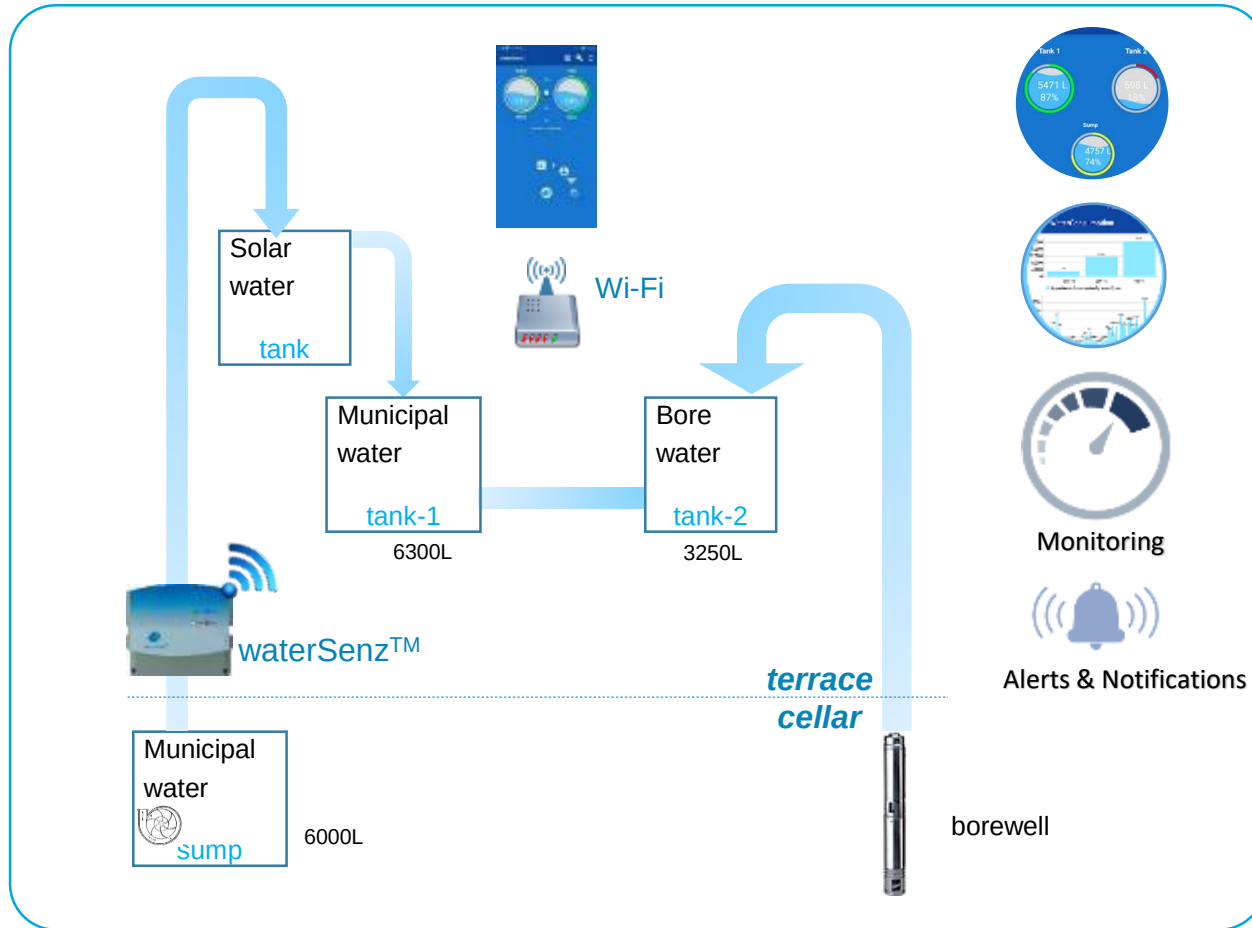- Mrs. Lalitha, Cap Gemini, **Australia**

OUR USERS SAY IT BEST

This is a very unique product first of its kind in India. Our life has become very comfortable after installing this unit as we have now stopped climbing up the ladder to see the level in overhead tank. With the app based monitoring system that waterSenz provides, we can monitor the situation from the comforts of our living or bed room any time of the day and ensure uninterrupted supply.

With waterSenz system we are able to monitor the level of water in the sump and take timely action to stop the inflow thereby preventing wastage of precious water.

Needless to say, installation of Water Sense has helped us to manage water usage smartly and also to avoid undue wasteful use as well.

We strongly recommend all citizens to install Water Sense system and help conserve water

- Dr P K Ashwini Kumar, IP Attorney, **Bengaluru**

I could fill overhead water tank by switching the motor on off with waterSenz app in my phone right from my drawing room. This daily water job made easy. Thanks waterSenz.

- Mr. Srinivas Rao, Retired from BHEL, **Hyderabad**

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Solar water **tank**

Wi-Fi

Municipal water **tank-1**
6300L

Bore water **tank-2**
3250L

waterSenz™

terrace cellar

Municipal water **sump**
6000L

borewell

Monitoring

Alerts & Notifications

Tank 1
5471 L 87%

Tank 2
508 L 10%

Sump
4757 74%

benefits

✓ *Visibility to water availability and consumption*
✓ *Consumption patterns by hour/day/month*
✓ *Leak detection & curb water loss*
✓ *Water consumptions reduced to the tune of ~42,000 litres/month*
✓ *Substantial savings in ₹*

Client: a residential villa at Kondapur near Gachibowli, Hyderabad

pre-waterSenz™ scenario
- managing water supply and pumping to overhead tanks manually
- no visibility on water consumption
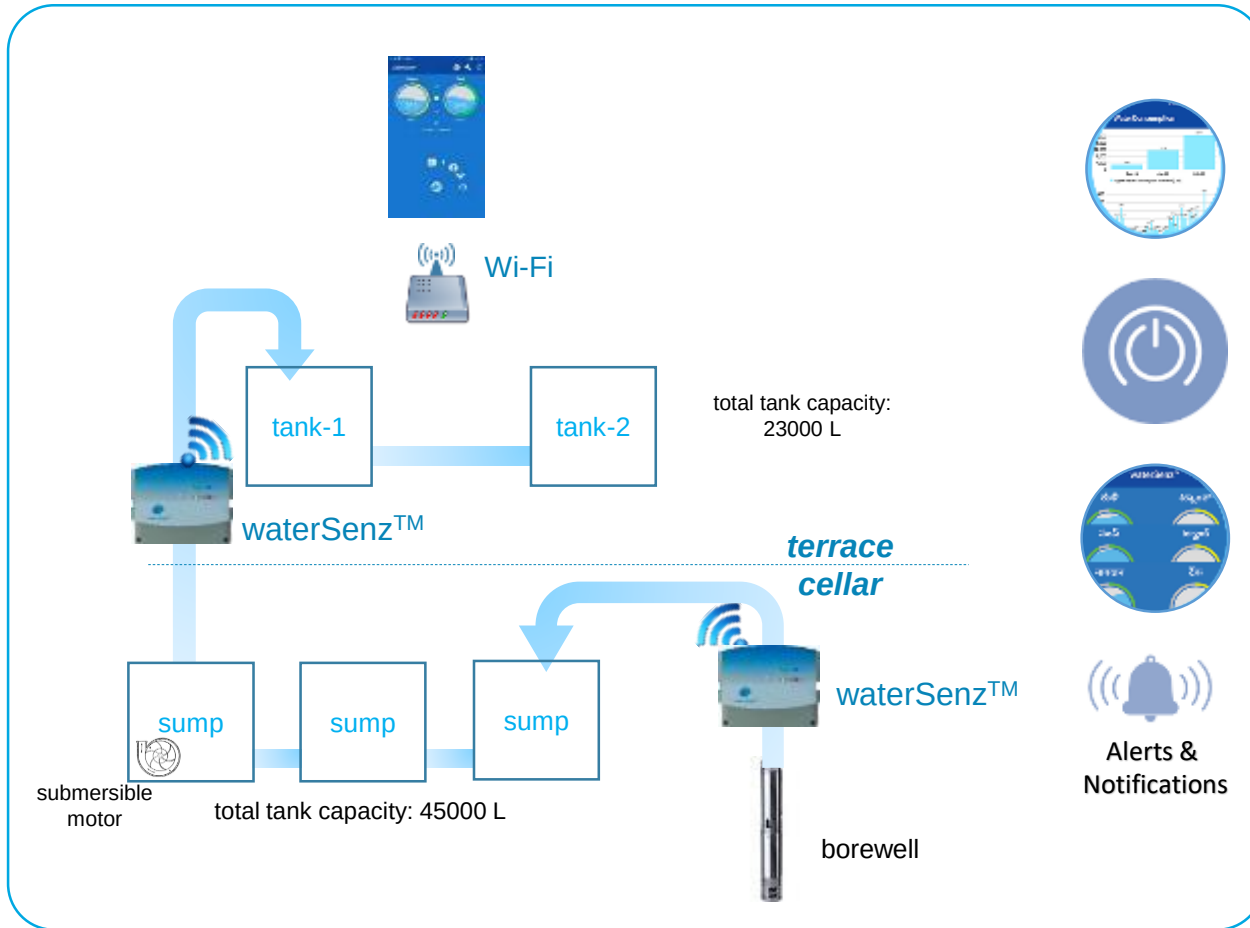- daily usage of 2,500 litres

POST-waterSenz™ scenario
With waterSenz™ ***Monitor***, patterns of water Utilization over a period of 2-3 months was observed
• found continued usage of water to an extent of over 500+ L, between *11pm through 6am*, when everyone at home were **asleep**!

This triggered a suspicion of water leakage; upon tracing the pipelines, found a leaking joint in their backyard. With fixing this joint
• they were able to arrest the leakage up to 1400L+/day
• reduced monthly billing
• avoided any possible damage to the property

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Wi-Fi

tank-1   tank-2   total tank capacity: 23000 L

waterSenz™

terrace
cellar

waterSenz™

sump   sump   sump

submersible motor   total tank capacity: 45000 L

borewell

Alerts & Notifications

benefits

✓ *Full automation*
✓ *Increased availability of water*
✓ *Reduced workforce resulting in reduced labour costs*
✓ *Overflow control resulting in power and water savings*
✓ *Substantial annual savings in Lakhs of ₹*

Client: Residential complex in Bengaluru housing 48 flats

pre-waterSenz™ scenario
The complex obtained water from Municipal Supply, Borewell supply as well as Water Tanker Supply
- in last 9 years, tried other Automatic water level controllers but in vain
- daily water tanker spend Rs.8500/-
- dependency on manual labour to pump water from Bore, Sump to overhead tanks and coordinate Tanker supply
- water overflows from Sump & Tanks

All these leading to loss of water, time and trustworthiness of the operators

POST-waterSenz™ scenario
- Water management fully automated reducing the labour needs by ~50%
- Residents/representatives could themselves monitor & control the water availability and consumptions
- Overflows in overhead tanks and sumps were arrested, resulting saving of water
- Zero Tanker water usage
- Significant ₹ savings in maintenance expenses