

MAHESH LUNANI

A Courageous Entrepreneur who is
Transforming the Water Sector with
Modern Tech advancements

The municipal water sector is localized, conservative and slow moving. It is a fraternity entrenched in relationships. The sector is not known for embracing new innovations without decades of proof, and there weren't many success stories of entrepreneurs from the outside. *"When you have that many barriers to overcome, experts and well-wishers would recommend spending your prime years in a sector that has much less hurdles and is far more rewarding. Nonetheless, the problems that face the water sector are too enticing for me to not keep pressing forward. As Warren Buffet famously said, 'be greedy when others are fearful',"* says **Mahesh Lunani**.

At the age of 45, **Mahesh Lunani** left an established corporate executive position to become an entrepreneur. The decision can be considered either naive or courageous. He is the **Founder** and **CEO** of Aquasight. As per **Mahesh**, Aquasight is the culmination of water, technology & AI.

According to **Steve Jobs**, *life is a series of dots, and you can only connect them looking backwards.*

During Mahesh's teenage years, he helped his dad with his business of water pumps. His first job out of college was working on data analytics & neural network models in the

automotive industry. Consequently, at a management consulting firm, he learned the art of organizing, restructuring, and expanding Fortune 500 businesses. **Mahesh** followed this up with experience in understanding technology and its impact on business transformation. Finally, he co-founded a corporate venture group that built next-generation digital businesses across a variety of vertical markets. He says, *"Looking backwards, it is the connection between the many dots that traversed my life."*

Why Aquasight?

Aquasight's offerings cover the entire life cycle of municipal water and its Industry First, Real-Time AI architecture & infrastructure allows it to innovate, add features, and deliver solutions at lightning speed. Its platform can consume both real time and non-real time data in a variety of formats, including operational data, geo-spatial data, physics models,

design data, log sheets, telemetry data, and weather data.

The company helps with optimizing water pumping operations and predicts neighborhoods that will experience water quality issues due to lower disinfection capacity and bacteria regrowth. The advanced solution helps in detecting leaks within homes faster than conventional approaches and assists in real-time water pressure management, water accounting, and demand management for water conservation. It detects blockages in sewers, the impact of rain on flooding, and helps with sewer overflow management.

As per the company, *"We predict and forecast the quantity and quality of waste coming into the treatment plants, identify inefficiencies in wastewater treatment, and assist in reducing operating costs while complying with permits."* It has also

"AQUASIGHT IS SMART WATER"



INDUSTRY
FIRST

REAL-TIME DIGITAL AI
INFRASTRUCTURE FOR WATER

deployed data solutions for solids management and disposal. It also has intelligent workflow automation of infrastructure risk, asset management, and capital planning that can cut days and weeks out of an engineer's time. And Aquasight's solutions help with detecting hotspots and infectious diseases underground to alert public health and elected officials to help minimize their spread.

Leading the Industry by
Creating In-house Technology

Except for servers and related services, Aquasight has built its entire technology in-house. The subject of fusing different types of data, such as geo-spatial and engineering models, is still in its infancy. The organization has built a robust system that can perform streaming analytics and execute real-time AI algorithms while continuing to be flexible enough to accommodate different client sensor combinations.

As per Mahesh, *"Our applications are common across our customer base, and we simply configure them based on customer requirements. Our development process*

accommodates new features while maintaining scalability. " The team has automated administration and QA/QC processes to detect if its streams & analytics are working and data quality is what it expects, so they can make rapid adjustments and perform audits. The team says, "We are also able to manage machine learning and artificial intelligence model performance and input drifts,-creating a world class process."

At Aquasight, the team also demonstrated to the software sector that verticalizing and

creating out-of-box solutions with an innovative architecture is a much more-cost-efficient alternative than the traditional software and implementation model for the cost-conscious and budget-strapped water & wastewater utility customer base.

Setting New Grounds in the Industry

"Every aspect of our business is designed to be scalable, sustainable, and maintainable. This is a task that is far easier said than done, " says Mahesh. Additionally, Real-Time AI is a

“WE ARE INSPIRED WHEN
RESIDENTS WROTE LETTERS
TO OUR CUSTOMERS
THANKING THEM IN SAVING
THEIR WATER BILLS”

AQUASIGHT
REAL-TIME INTELLIGENCE

Powering

SMART UTILITY, SMART OPERATIONS & SMART OPERATOR

ATLAS™
PUMP HEALTH & OPERATION

ACE™
COLLECTION SYSTEM

AMP™
ASSET MGMT & CAPITAL PLAN

AURA™
SMART WATER PLATFORM

APOLLO™
EFFICIENT WW TREATMENT

CEWS™
INFECTIOUS DISEASE SEWAGE SURVEILLANCE

O&M EFFICIENCY | ASSET INTELLIGENCE | RISK MANAGEMENT
KNOWLEDGE RETENTION | CAPITAL PLANNING | PUBLIC HEALTH

AWARDS & RECOGNITION



relatively new concept across sectors, so the company is treading new ground in an area where there is no playbook. He opines, *"We are not satisfied until we understand the underlying science before we innovate; it is our MO. We are setting a vision of what the future could look like by anticipating our customers' challenges."*

Getting Inspired by World Leaders

Mahesh believes there is a lot to learn from people who are at the top of their profession, whether it is sports, business, the arts, or entertainment. As an example, he has taken inspiration from Elon Musk's ability to win as an outsider. He had no background in sending people to space nor in making cars, and it took him almost two decades to be a breakthrough entrepreneur. The same goes for Warren Buffet, whose perspective on how a business should have a "wide and long-lasting moat around it" so as to keep its competitive advantage has inspired the way that Mahesh has built Aquasight.

Mahesh adds that even Mahatma Gandhi's ability to inspire an entire nation for a cause he believed in impacted his vision of what it meant to have a successful business. According to Mahesh, these are all amazing lessons to learn from people who have led impactful lives.

He also finds his family as a huge influence on him over his lifetime. He asserts, *"My paternal grandfather taught me important lessons about perseverance and, after seeing the 25,000 in attendance at his funeral, I learned the meaning of legacy. And of course, I will never forget the messages of carrying responsibility passed down to me by my maternal grandmother."*

Critical Solution offering During Pandemic

There are three ways Aquasight was able to create value during this pandemic without impacting or risking any of its employees or its customers. First, the company was able to successfully launch its products in over 25 cities, counties, and townships virtually while the Aquasight team and customers operated from their remote locations. This is testament to its business model and how it delivers solutions and services no matter the circumstances. Second, its customers require critical insights, intelligence, and data remotely, and Aquasight offered anytime, anywhere on any device access. This enabled them to deliver water or wastewater services safely and uninterrupted to their residents and end customers. Third, Aquasight developed an innovative and widely adoptable solution for underground COVID-19 monitoring using epidemiology and advanced data

"PANDEMIC HAS REVEALED THE STRENGTH OF OUR BUSINESS MODEL AND THE POWER OF OUR INNOVATION PROCESS AND MARKETING MAKING SOLUTIONS"

analytics. This has been a hugely successful initiative and has delivered fantastic results in college dorms, neighborhoods, jails, senior homes and long-term care facilities.

The Aquasight Way

Many values described in the corporate world, such as honesty, integrity, and trust, are simply table stakes. At Aquasight, the company has created something over and beyond called 'The Aquasight Way'. These are a set of 10 operating principles by which the company does its work every day. A few notable ones are mentioned below:

- Be curious and embrace ambiguity.
- Respectfully challenge the status-quo.

- Standardize, simplify, and scale.
- Execute and act based on the 80/20 rule.
- Foster multidimensional collaboration.
- Make your work inheritable.

According to Mahesh, it is essential to have a set of operating principles that can act as guideposts for current and new employees.

More AI Loaded Solutions in the Future

Aquasight is Smart Water. The management is playing a long game with Aquasight. They are launching one feature a month, constantly expanding the company's product set, and looking to venture out globally. Furthermore, the company's

algorithms and streaming analytics are being made available to its business partners so that they may use the company's API service, which can be linked with their offerings. Finally, through a subsidiary brand 'Theon', the company is leveraging Real-Time AI infrastructure to rapidly launch solutions in telematics, oil and gas, and manufacturing. *"As we look at the road ahead from where we stand today, we see nothing but endless possibilities,"* says Mahesh.

Advice for Budding Entrepreneurs

Entrepreneurs must minimize the impact of their mistakes to sustain as an entrepreneur, says Mahesh. He further adds, *"Ascertain that your expectations are appropriately set. We entrepreneurs are constantly concerned that we are not growing quickly enough, yet the market's pace may differ from your own. I had to learn patience the hard way. Have a decent group of mentors or someone with whom you can bounce ideas."*

He advises emerging entrepreneurs *"Make sure you address an important problem or an unmet need and identify what business you are in. You need a bit of luck, but you can create some of it by constantly trying to figure out how to get around dead-ends."*