How Aquasight Is Empowering Water & Wastewater Workforce In Cities With AI Technology

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CEOCFO: *Mr. Lunani, what is the concept behind Aquasight, LLC?*
Mr. Lunani: It is fundamentally a digital AI platform that is a shared service. It is utilizing voluminous amount of real-time data as a raw material to produce AI enabled actionable intelligence, in real time, whether it is an Infiltration, Inflow, water leak or water quality issue. Utility workforce can more efficiently run their utilities and use less energy, chemicals and manpower. Therefore, it is driving efficiencies, detecting anomalies, and providing insights on the state of the assets and infrastructure for utilities by leveraging the very data that they already generate.

CEOCFO: *What kind of data? Would you give us a couple of examples of available data not being recognized as useful?*
Mr. Lunani: Much of the innovation in our platform is utilizing streaming and real-time data for the purpose that they are not currently using. For example, the Smart Meter data is largely used for billing purposes based on their consumption. However, we are using the Smart Meter data to detect anomalies in consumption patterns or water loss so that we can notify when the toilet is leaking, basement might be flooded, or there are unusual patterns within a neighborhood. That is one example. The second is that there is a large amount of "in plant" water treatment or waste-water treatment plant data that is being generated, primarily to control the operations. We use that very data, in real time, to determine if they are efficiently running that operation or if there is a compliance risk.

A third example is the water quality data. This is the sampling that happens throughout the city and the hundreds of samples that utilities

take. That is primarily meant for compliance purposes, i.e. are you in or out of compliance? The way we are leveraging that is to predict which samples would likely fail or which areas in the city need to be better flushed. Therefore, we are repurposing this information in ways that have never been imagined before, so that municipalities are maximizing their investments on assets in which they have already invested and are driving the benefit for residents. We have built a whole library of algorithms, technologies, and innovation that the industry has never seen before.

CEOCFO: *Do people know they should be looking at these things?*
Mr. Lunani: That is a really good question! Many of the innovations that we have done are showing that there is another world out there. I am sure for fifteen/twenty years people have been talking about whether we can do this or do that. However, for everything there is a right time, a right technological evolution, and a willingness for entrepreneurs to come in and pave new roads. In the last three or four years, we have seen a great amount of education that shows the incredible possibilities with streaming AI enable real time analytics. I think it has started to embed into the workforce, but we are still very early in that adoption phase for this sector.

CEOCFO: *Would you tell us how your services help with the Covid-19?*
Mr. Lunani: Social distancing and working from home is forcing everyone to operate new ways. Aquasight gives utility managers the power to monitor the performance of their equipment from their quarantined space, as opposed to doing physical "in-person" checks, so they can attend to the most pressing issues during a time when health and safety is paramount. In addition, SAMI, our digital FTE built into the platform, monitors for such events and notifies utility workforce via e-mail.

CEOCFO: *How do you get a foot in the door?*
Mr. Lunani: I am not from this industry and it is unbelievable that I had a chance to meet over five hundred utilities in the last three to four years. It is not easy, especially in a sector that is highly localized. For every city in the country, every township, every village, there are entrenched localized relationships. This makes the barriers to entry very high.

We have been very fortunate that we are able to use a variety of strategies and tactics to move into large cities and medium towns alike, purely backed by the power of our innovation and peer to peer stories, which is really critical in this sector.

CEOCFO: *What aspects are getting the most interest? What are people overlooking when they do look at what you are doing? What are people most interested in accomplishing? What can you accomplish that people are not yet realizing?*
Mr. Lunani: We have different services which are technology enabled. There is one service called ATLAS, which deals with pumping operations and health. AURA is a service around smart water, distribution systems,

drinking water quality, meter anomaly detections, pressure and water loss and event monitoring. Then we have ACE for wastewater collection systems which turns on the lights in the sewer system that was never thought possible. Then one is APOLLO, which is for driving efficiency in wastewater treatment plants and minimizing compliance issues and lastly AMP for work automation asset management, risk modeling and capital plans development.

Having worked in many industries in the past, I can say confidently that the utility workforce is not just hardworking but they genuinely care about their residents and their well-being. But then it also has a set of old practices/approaches that can be hard to displace and the whole operation is very people and experience dependent. What is being overlooked is that utilities can be much more efficient if they can couple digital intelligence with physical knowledge. With the services and tools we provide, this new approach is very surgical, so you only go to places that require attention. This requires re-wiring the workforce and workflow. It is extremely powerful and as entrepreneurs and innovators, we owe it to the utility workforce in return for their dedication and hard work.

CEOCFO: *Might specific municipal services/departments be looking at upgrading or would it be an entire municipality?*
Mr. Lunani: Local governments are very different from city to city and one cannot ignore the local politics. That being said, every politician understands that this is a highly technical subject. Water and wastewater are public health issue number one. Most local governments rely on a set of proven and experienced people to serve the population.

Often some of the forward-looking mayors drive the agenda. For example, the Los Angeles mayor, Mayor Garcetti, envisions the city of Los Angeles' wastewater systems to have 100% recycling in the not-so-distant future. So, in this case the vision is being set by the mayor to drive the agenda of a particular utility.

In many respects the water utilities have their own cycle, because they think fifteen to twenty years in the future and the local politician cycle is only four years. Therefore, it does not exactly go together, but it does have a strong influence.

CEOCFO: *How do you implement the various systems?*
Mr. Lunani: What we have done is build a common, plug and play, platform for the whole country, so a small town would have the same platform as a large city. Because of this, we have pre-built a whole set of capabilities that they can use from day one.
We have industrialized the way we can bring a city on. You would be shocked to know that because of the way we build out our digital platforms the amount of time cities spend in deploying this is very limited. This is extremely efficient considering how much time they allocate to lot of other capital programs they have in place. Because of how the technology is set up, the utilities can put in minimal effort in deployment, and we can accommodate all kinds of variations of different cities. Therefore, we can configure them to a specific city water or wastewater system. That is the art of how we built the technology up.

CEOCFO: *Are you seeking funding, partnership or investment as you move forward?*

Mr. Lunani: Partnership for sure. We are looking at them seriously and we get lot of requests. In order for us to scale, a partnership is essential. In fact, today we are very actively engaged with many partners. Some are sales firms, engineering consulting firms, equipment manufacturers, and private operators; we are in discussions on how we can bring our technologies and services to every corner of this country and beyond the borders. Then as far as investment is concerned, it has to be very meaningful and one that fits our vision. We are building a company that will last for a very long time, and we are creating a sustained value on this planet for the customers and the workforce we serve. Therefore, we have to wait and ensure it is strategic and meaningful for us, then see if that makes sense.

CEOCFO: *What have you learned? What may have changed in your approach as you continue to develop services and talk with various potential customers?*

Mr. Lunani: Prior to this, I cofounded a venture group. We had built several different types of digital businesses across multiple industries: healthcare, pharma, etc. However, that was a corporate venture group. I had CEOs of these ventures, and I put a focus on it; we used to meet every month. However, every business is different, so I thought I had enough of a bag of lessons that I could bring to my own business.

Originally, we thought if we cooked a great meal that people would come and eat. However, one of the biggest things I learned is that we also have to teach how to eat it! When you are bringing a new product that is not out there, i.e. market maker, you have to do a great amount of hand holding to help understand how they can use it and how they can benefit from it and so on.

This is a big challenge that I had to learn and overcome and still continue to actually figure it out. With that being said, every day is a new learning, so we learn every day, and we adapt.

CEOCFO: *Why is Aquasight an important company?*

Mr. Lunani: In general, water is lifeblood. It is very critical for humans and for living things. By bringing a technology and AI to cities and townships and villages, that allows workforce to effectively manage their water and wastewater systems, not just efficiently, but also for the greater good of public health, is ultimately serving a great purpose. Through our tools we are empowering the hard-working people in these cities that are serving the residents and citizens, so that it can offset the water rate increases for the residents. Finally, it is great for the environment. Less energy, chemicals, pollution, polluted waters, and more cleaner drinking water is step in the right direction for the world around us. Therefore, it is a triple bottom line benefit and for that purpose, Aquasight has very long term, sustainable value for the greater good of mankind.