STORIES FROM OUR FOUNDERS - FOUNDER/CEO, AIZA INC.

AUDIO TRANSCRIPT

Adrian Walker (00:00):
My name is Adrian Walker. I am a serial entrepreneur, builder, creator, investor, and technologist. We had been playing around and circling around where could applied machine learning really take course, and what would it look like and what problem were we really trying to solve that we felt was massive enough of a challenge that would excite us to work on it for a while and have really big upside? In this country, waters an over 900 billion industry, and every single living person in this country requires both water and wastewater removal. When you turn on your faucet every day, or when you use the bathroom or your shower, all of that water has to go somewhere and be cleaned and recycled back into the system. So there's all these different issues that cause corrosion and cracks and failures to happen in pipes. And there's about 12 billion feet of water and wastewater pipe in the United States of America.

(01:05):
And if it's underground, right, it's really hard to access and it's really hard to understand what's actually happening with it. Almost 30% of the clean water that we produce, which is a very valuable resource, obviously no life on earth can survive without clean water. About 30% of the clean water that gets produced gets wasted because it leaks back into the ground from pipes. The same is true with waste water, which when that leaks, right, it has other health and hazard concerns. You don't want bad things leaking out and you don't want good stuff leaking out. It affects climate directly. It affects sustainability, public health, it affects a livable society. Your local municipality that needs to check this kind of work probably at best is going to check about one to 2% of your grid a year. Why is that an issue? It's an issue because if you only know about 1% of your issues because that's all you see, you don't know if there's bigger issues on the other 99% of the grid, and you can end up in a really bad place.

(02:06):
And we've seen this play out in real life pretty much everywhere around the world, to be honest with you. If we want to focus on the United States, Jackson, Mississippi, Flint, Michigan, East Palo Alto here in California, Kansas City, South Florida, Texas last year, New York City, I mean, the list kind of goes on and on and on. And so how could we prevent crises like these? How could we help water utilities see problems that they've never seen before? Automate that process, do it faster. And honestly, computer vision as a technology jumped out as a light bulb. We realized we needed to come up with new ways of sensing. We needed to think through autonomous systems that we hadn't thought of before.

(02:49):
So for instance, we're all very familiar now with drones in flight. So you can automate a drone and say where to go and it'll follow a path and t

hen land back again. That does not exist underneath the ground. These robotics kind of look like vehicles or tanks. So you pick up these manhole covers that exist on every street. So they drop this kind of, I'll call it like a remote controlled tank down in. And as they're driving that through, they're trying to inspect or assess what's going on, is just like a human being would do if the human being could be eight inches tall and walk through and have all the knowledge of a civil engineer. It's going to say, Oh, this is this kind of a crack that I see forming, or this is this kind of corrosion that I see happening. The same robotic could be sending messaging to a utility company to say, I need you to send a crew out to here because I picked up on something that's about to go.

(03:44):
And when you start to put vision and robotics together and machine learning and AI all together, it can start to automate at a much more rapid speed than even a human being can pick up on. Drop 100 of these in your system. They could literally be running 24/7 and they're feeding all that information back in real time. And real people can then make decisions on what they're seeing and what the most major issues are. That's something that we've been working on that is basically an industry first.

(04:18):
And so as you start to unpeel the onion, you start to see these other opportunities of where it can be applied or what it's going to also help. Like the pandemic opened a whole nother door for this company. Wastewater epidemiology is an emerging field of science. Can we predict the next pandemic before and help prepare society ahead of time? What if, let's imagine a future where instead of knowing only 1% of what's going on in your grid, you could know a 100% every single year. How would that change how you make decisions? How would that change where you spend tax dollars to fix problems in the most efficient way? How does that change what kind of public health benefits you can give all citizens, no matter where they lived in the city, whether it was a poor area or a rich area.

(05:07):
Everyone could have better access to information. Everyone could have better access to cleaner water. Everyone could have better access to non leaky sewage in their systems and their environments. What if that was the future? What if we could bring that future today? And so it is always interesting to me that water, waste water have never necessarily been seen as the more sexy of utility sectors to focus in on first or kind of like, Oh, water. That's cute. It's not energy and it's for obvious reason. We get it. We get it. But I'm a serial entrepreneur. This is not my first rodeo. And when you've been through some successes and some failures, you just get better and better at understanding when something is it. And to find an it is very, very difficult to do, quite honestly. And everyone who started a company can probably attest to that. So when you find that moment, it's an exciting moment for sure.

Speaker 2 (06:09):
This story was produced by Accenture's Black Founders Development Program. Get in touch with any of the founders featured in this series to get them the two Cs, cash and contracts that they need to grow.