

Growing water crisis needs a collaborative solution

By Michael Franze

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In just the last five years South Africa has faced two of the biggest challenges imaginable. We are in the midst of a once-in-a-century pandemic and, just two years ago, the City of Cape Town announced that it was on the brink of running out of municipal water. While all eyes are now on our government to come up with solutions to these ongoing threats, sometimes it is through the collective that we can find the most practical answers.



Michael Franze, MD of Citiq Prepaid

The World Economic Forum (WEF) has consistently ranked water scarcity as one of the greatest threats to humanity. In its 2019 report, the UN said that accessing water to support the world's nine billion people by 2040 will be one of the biggest challenges of the 21st Century.

For South Africa, the challenge is all the more acute with research predicting that we will have a 17% shortfall in water supply by 2040. More immediately, the city of Gqeberha in the Eastern Cape currently faces its own possible Day Zero before winter sets in as dams inch towards the 10% capacity levels, where the little water that is available is unusable.

It's not just about access

Our challenge is not just about access to water. It is the rapidly declining quality (due to poor environmental conditions as well as pollution) and the increase in price as a result of the growing need to purify water, as well as using price as a means to manage usage.

Unsurprisingly, most of the focus has been placed on the environmental challenges of sourcing clean, potable water. Understandably, the wholesale destruction of our wetlands and depressing levels of pollution deserve our urgent attention. But it is the decaying infrastructure that is possibly the most shocking of our water predicaments.

Already in 2018, Professor Neil Armitage, of the University of Cape Town's Department of Civil Engineering and deputy director of the Future Water research institute told the UK's *Huffington Post* that more than a third (36%) of our water was being lost. Much of it due to leaking pipes and theft.



Like Covid-19, water use requires permanent behaviour change

Jay Bhagwan 18 Mar 2021



Empowering people with information

The hard reality is that relying solely on municipalities to fix their aging infrastructure is simply not possible. Our fragile water network is experiencing exactly the same conundrum faced by our energy sector. Municipalities rely on the sale of water to pay for the maintenance of their infrastructure. Non-payment, leaks and illegal connections have resulted in decimated budgets. As every municipal manager will tell you, unlawful connections are not just robbing their coffers, but are delaying and denying any future system upgrades. The solution must rely on pragmatic, tried and tested methods. And it is here that leaning on the greater ecosystem will deliver the results.

One of the biggest lessons from the Western Cape's Day Zero crisis was that consumer behaviour could be changed - if they were given the information necessary to affect an altered attitude.

While there is no doubt that the City of Cape Town's extensive communication and outreach programme helped raise awareness of the crisis, the punitive charges also helped put the brakes on water consumption, especially in the leafy suburbs. But it was the city-wide water map that showed water consumption at the household level - and let homeowners compare their savings to those of their neighbours - that really helped radically shift behaviour.

This aligns with evidence from the energy sector where a study in the UK showed that users' power bills were reduced by up to 9% simply by making daily consumption easily available to users through prepaid meterage, indicative of the power of transparent information. More than just consumption monitoring, prepaid technology also allows for early leak detection, allowing for rapid response from the municipality - something the City of Cape Town said was one of the most important aspects of managing water in times of crisis.

By putting the solution into the hands of the average South African, we are empowering every household to contribute to the solution. Small efforts like these may not bring back our wetlands, but the smart use of technology can make a real difference.



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Mike Muller 3 Mar 2021



Cooperation is the way forward

South Africans are unbelievably resilient. We have always found ways to come together to tackle common problems. Now, as we find ourselves entering the second year of the worst pandemic of our lifetime, we have to find common solutions to the ongoing water crisis as well which, if left unchecked, will result in massive food and health insecurity. While our government is rightly focused on managing the socio-economic fallout of Covid, turning to the larger public-private ecosystem to find many small but incrementally useful pieces to the bigger solution is the best chance we have before we find ourselves in another crisis.

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