

# Good water management for profit and performance

Xylem is on a mission towards creating a more sustainable world by enabling customers to optimise water use and better manage dwindling resources. Xylem Africa's managing director, Vincent Chirouze, argues that all business and domestic users should take a proactive, detailed and holistic view to achieve this.

**W**ater is a vital and scarce resource. Many businesses, particularly in sectors such as manufacturing, mining and agriculture, use water as part of their core output processes. Practically every business relies on water to help maintain it, from flushing toilets to boiling kettles to cleaning services. Water is an inextricable business cost.

Yet when it comes to the management of water, it's often not treated in that way. To illustrate the point, Xylem Africa's managing director, Vincent Chirouze, compares water to electricity:

"Everybody talks about the electricity crisis. The thing about electricity is it's either

there or not. It's very easy to determine and quantify the amount of electricity you need, its quality and so forth. But water is very different. Everybody seems to be getting access to some type of water, but they often assume the quality and cost are the same, regardless."

This attitude goes some way to explain why water management is a much lower priority than managing power, rent and other business costs. Nonetheless, companies are realising the importance of looking more closely at water, particularly from a holistic and strategic point of view.

## Water's new value

The primary reasons for this change include

lower operating costs, securing water supplies and ensuring the quality of water. Contrary to how we view clear water as clean water, numerous quality variables impact water's uses. Water contaminated with heavy metals is unfit for drinking, while saline water is not suitable for crops.

Water is under pressure from growing populations, urbanisation, climate shifts, and changing watersheds. Water is becoming scarcer and more expensive, so a once-abundant vital resource now requires much closer cost- and management scrutiny.

"We have to become smarter about water," says Chirouze. "The pressures on water translate into pressures on companies.



But this also means that good water management can improve business profit and performance."

## A new approach to water management

Yet many will object: they do manage water, they look at their consumption bills, and they ensure there aren't leaks on their facility's pipes. While such actions are commendable and proactive, they only scratch the surface. Effective water management runs a lot deeper.

"A big problem with water is, again, we think of it as similar to electricity. The supply and quality are quite stable, so we only look at our consumption. But that approach ignores a lot of cost factors. One never sees what we call the 'true cost of water'."

For example, water might be pumped

water from a private source such as a borehole. But are power consumption or the maintenance costs of the pumps being factored in? Is the sustainability of the water source included and can money be saved by helping to rehabilitate it? How much is being spent treating the water and can money be saved by recycling it, rather than simply releasing it back into the municipal sewers, storing it in wastewater ponds or, much worse, releasing it into local river systems.

Answering such questions can lead to some creative solutions, such as the Thakadu Nickel Purification Plant in South Africa's North West province. This site reuses crude wastewater from a nearby mine to extract nickel for batteries and other uses.

## A full, detailed picture

Companies often treat water too broadly, but also too narrowly. Water costs are frequently determined at site-specific levels, only focusing on very water-scarce sites. But numerous studies, including work conducted by the US Department of Energy, show that this neglects multiple factors that contribute to water costs and, crucially, negates the need for a company-wide water management strategy. It is telling that most organisations don't have a dedicated role for water management, even when water is a considerable responsibility.

"Managers should develop a business-wide water management strategy, then focus on site-specific issues. Water is an integrated resource and it is surprising to see just how

much and where a business uses water. So a detailed, complete picture is needed."

Can't technology help? In this age of digital excellence, won't a few smart meters do the trick? Chirouze cautions against this kind of thinking. Yes, smart technology is very effective, but technology on its own won't lead to sustainable solutions.

He equates the necessary strategy to a pyramid: "Smart technology is the top of the pyramid, but it will collapse if supporting layers underneath are not factored in. We have the technology but we don't always have the social etiquette, in the sense that people don't value water. If people have water access, what's the problem? Why should we care where it's going to? It's only when our water supply dries up that it becomes a problem," argues Chirouze.

Fortunately, as is typical with underestimated costs, if one focuses on a water management strategy, there are near-term and long-term wins to be had. Major companies that have focused on water have comfortably realised cost reductions of between two and three percent within a year, and even more as they tightened their strategies.

On one hand, water management is a survival imperative as the resource grows scarcer and less predictable and demand for it rises. On the other, water is a poorly managed resource that will pay dividends once it's brought under clear and proactive control. However one looks at it, good water management leads to greater profit and performance.

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