

FOSTERING AN INNOVATION CULTURE TO SUPPORT UTILITY MODERNIZATION

Yesterday's business as usual cannot cope with tomorrow's challenges, and the water sector is no exception. Will we be able to innovate our way out of climate change, water scarcity and rapid urbanization? Maybe yes. After all, by coming up with a vaccination within a short year, humanity has innovated its way out of the Covid crisis. Water-related innovation has already brought us smart homes, nano membranes and drop irrigation, to name just a few. Yet, many decision makers in the water sector are unaware of the opportunities water innovations provide to reduce costs, create sustainability and help us move towards the green economy of tomorrow. This session set out in search of ways to implant a culture of innovation in the traditionally conservative water sector.

For the kickoff presentation, host Philip Weller, IAWD's Danube Water Program Coordinator, introduced Andrea Gysin, Head of Research, Development and Innovation at Thames Water, Great Britain's largest utility, noting that for the very first time in his long career he has met an innovation specialist working full time in a water company.

A world of opportunities

Ms. Gysin walked the audience through the innovation strategy, culture and ecosystem of a private utility serving 15 million customers from source to tap, and taking pride in issuing the lowest water bills in the UK.

“There is a world of opportunities to do more with what we have”,

says Andrea Gysin, in the same breath urging utilities to be clear about their priorities. With the intention to drive costs down, keep risks down and to respond to changing regulations, Thames Water has set five priorities: Reducing leakages, driving pollution down to zero, ensuring continuous supply, introducing cost effective, low carbon solutions and pushing for carbon neutrality.

Innovation does not happen in splendid isolation, though, rather in a highly complex ecosystem of stakeholders including regulators, suppliers and academia. She stressed that the real challenge lies in moving from point solutions to the systems level and to take the whole company along on the journey:

“We can’t transform without engaging everybody and empowering our people to innovate.”

Which, again, is impossible without leadership and a champion of innovation at the top of a company.

Strategic partnerships are a cornerstone of the Thames Water innovation culture: “Wherever it makes sense, we team up to drive change,” says Andrea Gysin, also mentioning that single-mindedness can be a trap:

“When things don’t work, you need to know when to stop.”

Tradition versus innovation

Next to take the stage was Lyubomir Filipov, responsible for strategic partnerships and regulation at IAWD member Sofia Water. His company dips into Bulgaria’s startup ecosystem which is thriving with the help of partially private and partially EU-funded venture capital. The program started out by identifying a suitable venture capital team, eventually teaming up with a partner company that runs its own accelerator program, teaching startups everything from like financial planning and strategy development down to marketing. Together with this venture capital partner, Sofia Water launched a call for green innovations, selecting six candidates from altogether 80 applications, and entering those into a two months acceleration program. After a final pitch, Mr. Filipov’s team picked two startups for real-world evaluation, one that has invented a leakage identification system through data analysis combined with satellite images, the other developing a device for smart water quality testing in the network. Poised to repeat the process annually over five years, Mr. Filipov expects boost not only for his company and the startups involved, but for the whole sector:

“People believe that the water sector is very traditional, with nothing interesting happening here. We are out to prove them wrong.”

A cultural shift is underway

There is indeed a cultural shift underway in the sector, says Blanca Antizar, European Director of Consultancy at Isle Utilities, a company that acts as an innovative technologies catalyst for 300 companies worldwide: “Utilities are under increasing pressure to meet growing demands and challenges. They need to invest, they increasingly develop an understanding of how science and innovation can help, and they are increasingly willing to take risks. The internet plays a large role here, quickly spreading news of new technologies and innovations.”

Much like all the panelists before her, Ms. Antizar stresses the huge potential in innovative technologies and the importance of communication:

“We strongly believe that evaluating innovation is a job for humans, not for algorithms. Yet we have to speed up technology adoption cycles. In the water sector, implementing a new technology typically takes up to ten years, and few startups can secure enough funds to survive that long.”

We have to speed thing up, and here it is important to help emerging technology players understand how the sector works, how to interact with investors and how to get into a conversation from the earliest stages of a development.”

Isle Utilities believes in bringing all key stakeholders together in networks like the Water Action Platform, where thousand members from everywhere on the planet share best practices and learn about successful innovation: “It’s the right thing to do and it is for the benefit of us all.”

Financing innovation

Treating innovation culture from the investment angle, David Tyler, Water Sector Specialist at the European Bank for Reconstruction and Development took the stage. While the EBRD has engaged in initiatives like the Green Cities Program that mobilized investments to the tune of three billion Euros in 51 cities, the bank defines itself less as an innovator, and rather as a fast follower:

“Our clients want to make safe investments, and therefore our projects need to be bankable.”

Yet the EBRD is keenly aware of the value of and the need for innovation: “During the Green Cities program we have progressed from traditional issues to blue/green infrastructure and smart digitalization projects. We are aware that there is a need to connect people who offer innovative solutions with cities in search of new approaches, and we hope to launch a platform next year that will facilitate matchmaking between cities, innovators and investors.”

Communication as innovation booster

In the following discussion, the panelists mentioned numerous stumble blocks on the way to a working innovation culture, the most important being company size. Here, Andrea Gysin mentions that while investments in latest technology can be an unsurmountable challenge for small utilities, collaboration models can help: Big companies like Thames Water, sometimes slowed down by their sheer size, could team up with smaller utilities, using them as test pads for promising innovations.

Another, and maybe the biggest challenge of them all is communication:

“We need to talk more, both inside the company and across the sector, because with communication comes cultural change”,

says Blanca Antizar. Lyubomir Filipov adds that this needs top-down support: “There can be no cultural shift without leadership, and in a sector as conservative as ours, it is important not to push, but to convince in a prolonged, ongoing discussion that involves everybody in the company. This process takes time.” Mr. Filipov closes with a quote from his favorite book, Lean Startup by Eric Ries:

“Reading is good, but action is better. Let’s act!”