WEBINAR REPORT

Digitalisation of Water and Sanitation Services in Africa

What Real Impacts on Professions and Performance?

Date	May 21, 2026
Format	Webinar
Duration	1h30
Organizers	African Water and Sanitation Association (AWASA) & African Media Network for WASH (RAM WASH).
Moderator	Ms. Géraldine Mpouma Logmo, Vice-President of the Strategic and Technological Council (STC), President of the Association of Professional Women in Water, Sanitation and Environment (APWWSE), Cameroon.
Participants	More than 150 from several countries

1. Context and Rationale

The water and sanitation sector in Africa faces a convergence of major pressures: accelerated urbanization, water resources under strain, considerable investment needs and growing user demands. In this context, digitalization stands out as an essential strategic lever. Remote network management, mobile payment, artificial intelligence, geographic information systems these tools concretely transform the operational efficiency of operators and the quality of service to subscribers.

However, African experience teaches that technology alone is not enough. Successful transformations are those that have managed to combine technological innovation, reskilling of human resources and adaptation of governance. The sanitation sector, long neglected, illustrates this complexity with the emergence of new professions and new value chains that are still insufficiently structured.

The climate dimension further amplifies these challenges: operators must now integrate resilience into their management model to cope with increasingly frequent water crises.

This webinar provides a strategic dialogue space to analyze these changes and formulate concrete guidance for WASH sector actors in Africa.

Key Message :

The digitalization of the water and sanitation sector in Africa is a real opportunity, but it will only bear fruit if it is accompanied by a profound transformation of skills, organizations and governance. Technology without human capital is not enough.

2. Webinar Objectives

General Objective

To critically and thoroughly analyze how digitalization is reshaping professions and organizations in the water and sanitation sector in Africa, and to what extent it effectively contributes to improving the performance of service operators.

Specific Objectives

- **To decode the professional** changes induced by digital technology in the sector, distinguishing between gradual evolutions and profound disruptions that redefine functions and responsibilities;
- **To map the critical skills** to be developed as a priority so that the teams of African operators can steer, operate and fully leverage the deployed digital tools;
- **To highlight the synergies between technological innovation**, operational performance, inclusion of vulnerable populations and strengthening of resilience to climate shocks and water crises;
- **To showcase field experiences,** particularly in the sanitation sub-sector, by identifying innovative and replicable models and the conditions for their scaling up;
- **To draw actionable strategic guidance for operators,** public decision-makers and technical and financial partners, to accelerate an inclusive and sustainable digital transformation of the WASH sector in Africa.

3. Webinar Programme

The webinar unfolded according to a structured sequence designed to ensure the smooth flow of exchanges and the quality of presentations :

N°	SEQUENCE
1	Session introduction, objectives and ground rules by the moderator: Ms. Géraldine Mpouma Logmo, Vice-President of the STC
2	Presentation by the webinar sponsor: GROUPE EXPERTISE LOCAL
3	Opening remarks by the President of the African Media Network (RAM WASH), Mr. Moussa Thiam
4	Inaugural address by the Executive Director (ED) of AfWASA, M. Olivier GOSSO
5	Address by the first panelist, Sanitation Director, Mr. Hippolyte GOGO, SODECI (Côte d'Ivoire)
6	Address by the second panelist, Head of Division / Human Resources Development, Ms. Nabila Louaga, ONEE (Morocco)
7	ddress by the third panelist, General Manager, Mr. Magatte NIANG, SEN'EAU (Senegal)
8	Q&A session and interactive exchanges
9	Webinar synthesis
10	Closing remarks and call to action, Mr. Olivier GOSSO, ED AfWASA

4. Opening Remarks: Mr. Moussa Thiam, President of RAM WASH

In his capacity as President of the African Media Network for Water, Sanitation and Hygiene (RAM WASH), Mr. El Hadj Moussa Thiam expressed his satisfaction at seeing this strategic partnership between RAM WASH and AfWASA come to fruition, around a series of webinars dedicated to the major challenges facing the sector on the African continent.

He emphasized that the challenges related to water and sanitation cannot be addressed without dialogue and better circulation of information between institutions, companies, experts, the media and citizens. He recalled that the digital transformation of the sector is now a reality in several African countries from Rwanda to Ghana, through Cameroon, Uganda and South Africa and that digital technologies are already making it possible to improve network management, infrastructure monitoring, relations with users and the overall performance of services.

Key Message :

1) Digital transformation must remain inclusive and serve the populations.
2) Innovative solutions must be adapted to African realities.

5. Inaugural Address

Keynote : Mr. Olivier GOSSO
Executive Director of the African Water and Sanitation Association (AfWASA)

Theme*: Digitalisation of Water and Sanitation Services in Africa, What Real Impacts on Professions and Performance ?*

Water and sanitation services in Africa are on the threshold of an unprecedented transformation. Faced with rampant urbanization, growing pressure on water resources, structural sanitation deficits and heightened climate vulnerability, African operators have no choice: digitalization is now a strategic necessity, not an option.

Far from being reduced to the introduction of new technological tools, this digital revolution encompasses a profound and systemic transformation technological, organizational and human. Smart metering, remote network management, artificial intelligence, predictive maintenance, mobile payment, digital mapping of sanitation infrastructure: these complementary innovations enable operators to manage their services in real time, optimize their resources, strengthen relations with users and make decisions based on reliable data.

The impacts are measurable at three levels. At the operational level, digitalization reduces water losses, improves service continuity and anticipates breakdowns. At the commercial level, it optimizes revenue collection, streamlines billing and promotes financial inclusion. At the institutional level, it strengthens governance, improves transparency and accelerates decision-making.

But the success of this transformation rests above all on human capital. WASH data analyst, GIS manager, cybersecurity expert, digital innovation officer: new professions are emerging and call for structured upskilling, ambitious change management and assertive transformational leadership.

For African decision-makers, the message is clear: anticipate, invest, modernize, strengthen and prepare. The best-performing African WASH services of tomorrow will be those that have known, from today, how to make digitalization a lever of resilience, efficiency and sustainability.

Key Message :

The digitalization of WASH services in Africa goes beyond mere technological adoption. Faced with the continent's structural challenges urbanization, water stress, climate vulnerability it constitutes a lever of systemic transformation that redefines professions, strengthens operational, commercial and institutional performance, and builds operator resilience. Its success, however, rests on a fundamental imperative: to invest massively in human capital, skills and governance.

6. Panelists' Addresses

Panelist 1 : Mr. Hippolyte Gogo

Sanitation Director | SODECI — Water Distribution Company of Côte d'Ivoire

Theme: *Transformation of Sanitation Professions in Africa: Towards Innovative and Inclusive Models, Digitalization of Sanitation, an Accelerator of Economic and Social Performance*

This address challenges a preconceived notion that is still too widespread: that digitalization is merely a technological luxury reserved for advanced economies. The demonstration is unequivocal precisely the opposite is true. In an African context marked by rampant urbanization, ageing infrastructure and constrained budgets, digital technology constitutes the most powerful lever for the structural transformation of the sanitation sector.

The approach championed by SODECI rests on a strong conviction: digital technology is a genuine "financial statement sanitizer." Thanks to predictive maintenance fed by IoT sensors, planned interventions prove three to five times less costly than unplanned emergencies. Geo-optimization of emptying rounds reduces mileage by 30% and fuel consumption by 25%. Real-time traceability of collected sludge virtually eliminates fraud. Overall, operational savings reach 40%, while customer satisfaction improves by 50%.

On the commercial side, the reliability of billing through cross-referencing GIS and consumption data improves revenue collection by 45%, and mobile payment reduces unpaid bills by 60% while broadening access to services for the most vulnerable populations.

This transformation is also profoundly human. The traditional field operator gives way to the field data analyst; informal workers are integrated into professionalized and certified value chains, creating an unprecedented social inclusion dynamic.

SODECI's strategic vision is resolutely continental: to build a centre of excellence in West Africa, deploy a replicable model across five countries and demonstrate that digital, inclusive and high-performing sanitation is no longer an ambition it is an actionable reality today.

Key Message :

SODECI demonstrates it eloquently: the digitalization of sanitation is not a luxury it is a strategic investment with measurable returns. Predictive maintenance, real-time traceability, mobile payment, geo-optimization the gains are concrete: 40% in operational savings, 45% in additional revenue collection, 50% increase in customer satisfaction. Beyond financial performance, it is a human and inclusive transformation that professionalizes occupations and opens access to services for the most vulnerable populations.

Panelist 2 : Ms. Nabila Louaga

Head of Division — Human Resources Development | ONEE — National Office of Electricity and Drinking Water (Morocco)

Theme : *Digital Transformation and Human Capital: The Skills Challenge in the WASH Sector in Africa*

Faced with an African water context marked by intensifying water stress, recurring drought episodes and growing demographic pressure, the National Office of Electricity and Drinking Water of Morocco, Water Branch, is undertaking a major structural transformation. This transition is organized around two inseparable axes: a major institutional reform and an ambitious digitalization programme supported by the African Development Bank.

On the institutional side, the creation of Regional Multi-Service Companies (SRM) between 2024 and 2025 led ONEE-WB to refocus its activities on its core business: drinking water production, transport through large adduction systems and quality control. This strategic repositioning frees the Office to fully invest in operational and technological excellence.

The digital transformation underway covers all business processes, HR information systems, document management and steering tools. It aims to improve operational performance, strengthen data traceability and accelerate decision-making in an increasingly complex environment.

But the conviction driving the Human Resources Department is clear: no technology can be sustainably deployed without the women and men who master it. With 3,466 staff members with diverse expertise hydraulics, automation, IT, chemistry, management ONEE-WB possesses an exceptional human capital that must now be developed. The HRD is working on this methodically: identifying key competencies, anticipating new profiles, developing digital skills, supporting change management and promoting a collaborative, performance-oriented management culture.

The final message is unambiguous: smart infrastructure is indispensable, but the true driver of transformation remains human capital.

Key Message :

ONEE-Water Branch of Morocco embodies a two-speed transformation. The creation of Regional Multi-Service Companies refocuses the Office on drinking water production, while a vast digitalization programme, supported by the AfDB, modernizes all processes. But the HRD's conviction is firm: behind all staff members with their multiple areas of expertise, it is human capital its skills, its adaptability and its commitment that remains the true driver of any lasting transformation.

Panelist 3 : Mr Magatte NIANG

General Manager | SEN'EAU — Senegal

Theme: *Digitalization and Transformation of Water Services in Africa, Opportunities, Limitations and Conditions for Success*

This address sets out the framework with clarity from the outset: the digitalization of water services in Africa is not a technological choice it is a performance imperative dictated by unavoidable structural pressures. Accelerated urbanization, water stress, growing demands for service quality and the need for decisions based on reliable data all realities that make digital transformation non-negotiable for African operators.

The vision championed by SEN'EAU is resolutely pragmatic: technology is not an end in itself, but a lever in service of three fundamental ambitions operational, commercial and institutional performance; improving relations with the citizen-user; and the sustainability of water resource management. This conviction is reflected within SEN'EAU by structural workstreams already underway: self-care portals and mobile payment, communicating prepaid meters, data governance, information system modernization, cybersecurity and automation of business processes.

However, the most profound effect of this transformation remains human. Digitalization redefines water sector professions, gives rise to new profiles data analysts, GIS experts, cybersecurity specialists, transformation project managers and raises the level of requirement across all teams. Without staff buy-in and structured upskilling, even the most sophisticated tool remains underutilized.

Five conditions for success are clearly set out: strategic ownership at the highest level, investment in training, robust data governance, continuous change management and lasting technical and financial partnerships.

The message to African decision-makers is straightforward: engage the digital trajectory today, pool experiences between operators and place the user at the heart of every decision.

Key Message :

SEN'EAU delivers a conviction forged by field experience: the digitalization of water services in Africa is not an option it is a strategic imperative. Digital customer relations, smart metering, data governance, cybersecurity the workstreams are underway. But technology is only as valuable as the transformation it induces in professions and organizations. Five conditions for success are essential: vision, skills, data governance, change management and lasting partnerships.

7. Q&A Session

The interactive session allowed participants to ask numerous questions, revealing strong enthusiasm for these topics. The main subjects addressed are summarized below.

7.1. What are the priority new skills for WASH sector professionals?

Digital transformation requires a renewal of skill profiles, namely: digital technical skills (SCADA, IoT, GIS, ERP), data governance and analysis, industrial cybersecurity, organizational change management and cross-cutting skills such as mobile payment. These requirements apply to all staff, from field level to management. The new strategic profiles in demand are data analysts, GIS experts, cybersecurity specialists and transformation project managers. Data-driven management is now a fundamental competency for any sector professional.

7.2. Is digitalization profitable for African WASH operators?

Analyzed in terms of total cost over time rather than initial cost, digitalization proves highly profitable. The documented results are compelling: 40% in operational savings, 45% improvement in revenue collection, 25% increase in ROI and a return on investment within two to five years. Several African operators have recorded gains of 15 to 25% on their operational costs within the first three years. The real question is therefore not the cost of digitalization, but rather the cost of non-digitalization: undetected losses, repeated emergencies and chronic unpaid bills that far exceed the investment made.

7.3. How does digitalization help reduce fraud and losses?

Digitalization is a powerful tool against fraud and non-technical losses. Through smart meters, GIS-billing cross-referencing and GPS tracking of field teams, real-time traceability makes it possible to detect illegal connections and reduce unpaid bills. Each morning, a dynamic map of loss zones guides interventions, precisely distinguishing physical losses from commercial losses. Operators that have deployed these tools record a reduction in commercial losses of 10 to 20%, freeing up resources that can be directly reinvested in network extension and improvement.

7.4. How can autonomous sanitation be digitalized, particularly in the absence of records?

The digitalization of autonomous sanitation is organized in three progressive stages. First, the census and mapping of existing infrastructure septic tanks, latrines via mobile applications such as KoboToolbox and ODK, compensating for the absence of records. Then, progressive instrumentation through level sensors enabling targeted predictive maintenance. Finally, complete digitalization of the service chain: from emptying requests by SMS or mobile application, to GPS tracking of trucks, through to traceability at the treatment station. This long-marginalized sub-sector thus becomes structured, traceable and economically viable.

7.5. How can data governance and the digitalization of customer services be ensured?

Data governance rests on three pillars: a rigorous quality policy, a data dictionary shared across departments, and robust cybersecurity systems. The example of SEN'EAU in Senegal illustrates this approach with dedicated focal points per department and a real-time management dashboard. On the customer relations side, digitalization produces tangible results: a 30% reduction in complaints, a 50% improvement in customer satisfaction and strengthened financial inclusion. Data becomes a strategic asset and the user is placed at the heart of the service system.

7.6. How can the sustainability of digital platforms be ensured beyond projects?

The sustainability of digital platforms rests on five essential conditions: a longevity-oriented design favoring scalable, open-source and interoperable solutions; an economic model where the cost is absorbed by the value generated; continuous human capacity building; strong local governance ensuring the operator retains ownership of its data and systems; and post-project support of twelve to twenty-four months ensuring a successful transition after the end of external funding. These five conditions are non-negotiable to sustain achievements and prevent platforms from being abandoned after project closure.

7.7. What are the challenges related to access to electricity and Internet in Africa?

The electricity and connectivity deficit is the main barrier to digitalization in Africa, but adapted solutions exist. For energy, solar panels coupled with batteries autonomously power sensors and remote transmission equipment. For connectivity, LoRaWAN networks, GSM/GPRS and satellite technologies such as Starlink offer accessible alternatives, including in remote areas. In rural areas, SMS and USSD allow fault reporting and bill payment without a smartphone or Internet connection. A pragmatic and progressive digitalization approach, from urban to rural areas, remains the most effective strategy.

7.8. What is the impact of digitalization on employment and social inclusion?

Digitalization produces a creative destruction effect on employment: it eliminates repetitive positions — meter readers, round agents — while creating higher added-value jobs such as

supervision technicians or data analysts. The net balance depends on the capacity of organizations to train and redeploy their staff. The risk of exclusion of rural populations, women and low-skilled workers is real and requires multi-channel solutions combining digital and physical approaches. Digitalization also creates new technological and energy dependencies that must be anticipated and managed.

7.9. Do donors finance training for new digital WASH professions?

Several donors already finance digitalization components in their projects: the AfDB with ONEE in Morocco, the World Bank in its sectoral projects, the AFD and the European Union in the organizational transformation of operators. However, there is not yet an African institute dedicated to new digital WASH professions. This is the advocacy that sector actors operators, governments and associations must collectively advance with donors. AfWASA, through its Water and Sanitation Academy currently being deployed in Kampala, is particularly well positioned to champion this structuring initiative.

7.10. How does digitalization improve sectoral regulation and governance?

Digitalization profoundly transforms the relationship between operators and regulators. Real-time shared dashboards give the regulator direct access to performance indicators: coverage rates, water quality, incidents. Automated periodic reports guarantee reliability and transparency without manual processing. A Ministry of Water can also deploy five complementary portals: regulation, administration, sectoral data, investment monitoring and citizen services. The experiences of SONES-SEN'EAU in Senegal and ONEE in Morocco illustrate this practice, transforming sectoral governance towards greater transparency, accountability and efficiency.

Key Message :

The digitalization of the WASH sector in Africa is no longer an option it is a strategic imperative. It improves operational performance, reduces fraud, optimizes revenue collection and strengthens customer relations. Its deployment, however, requires a clear vision, rigorous data governance, strengthened human skills and solutions adapted to local realities. The real risk is not investing in digital technology, but failing to do so to the detriment of sustainability and universal access to water.

8. Key Lessons

Structural message :

Digitalization is not an end in itself, but a strategic lever for the lasting transformation of water and sanitation services in Africa. Its success rests on an integrated approach articulating technology, governance, financing and human capital.

The webinar exchanges yielded several key structural lessons:

- Digitalization is a systemic transformation, not merely a technological one: it engages organizations, processes, skills and governance mechanisms alike.
- Performance must remain the central objective: digitalization only finds its full justification if it improves operational results, optimizes costs and enhances the efficiency of services to users.

- Data is a major strategic asset: its value lies not in its accumulation, but in its intelligent exploitation in the service of decision-making and action.
- The human factor is decisive: the success of transformation is closely dependent on training, team buy-in and change management.
- Systems integration is a condition for performance: siloed approaches significantly limit the impact of digitalization.
- The shift from curative to predictive is at the heart of the value created: anticipating breakdowns, overflows and anomalies rather than suffering their consequences.
- Pooling and cooperation between African operators accelerate the adoption of best practices.

9. Recommendations

For operators

- Develop a digital strategy clearly aligned with performance objectives, with a prior return on investment analysis.
- Give priority attention to data quality, its effective exploitation and systems integration.
- Adopt a progressive approach: pilot phase, validation, then large-scale deployment.
- Invest in strengthening internal competencies and change management.
- Establish robust data governance, with dedicated focal points per department.
- Integrate the population as an actor in the system (4P model: Partnership, public, private, population) to strengthen infrastructure monitoring and sustainability.

For states and regulators

- Establish a regulatory framework adapted to digital challenges and conducive to innovation.
- Direct investments primarily towards water production, infrastructure, energy and connectivity.
- Promote an inclusive approach integrating youth, women and rural areas.
- Develop digital portals for regulation, sectoral transparency and the digitalization of administrative procedures.

For technical and financial partners

- Promote integrated solutions linking water, energy and digital technology.
- Develop financing mechanisms better adapted to African operators, including capacity building components.
- Actively support pilot projects, data platforms and training activities dedicated to WASH digitalization.
- Finance the creation of institutes specializing in new digital WASH professions.

For AfWASA and RAM WASH

- Structure digital initiatives at the continental level, notably through shared sectoral platforms.
- Strengthen experience-sharing and benchmarking spaces between African operators.
- Develop the training offer of the African Water and Sanitation Academy (AWASA), Kampala, by integrating modules dedicated to WASH digitalization.

- Organize a second edition of this webinar to deepen the themes raised and address the many questions that remained unanswered.

10. Conclusion

This webinar, which recorded strong participation with 166 active participants out of 433 registered, representing 127 organizations from 31 African countries, including 38% women and 25% youth aged 35 and under, confirmed that digitalization is now an essential lever for sustainably improving water and sanitation services in Africa.

The experiences shared by SODECI (Côte d'Ivoire), ONEE (Morocco) and SEN'EAU (Senegal) concretely illustrated that digital transformation is possible, profitable and value-creating, provided it is well structured, progressively deployed and supported by a resolute investment in human capital.

The digitalization of the WASH sector in Africa is no longer an option it is a strategic imperative. It improves operational performance, reduces fraud, optimizes revenue collection and strengthens customer relations. Its deployment, however, requires a clear vision, rigorous data governance, strengthened human skills and solutions adapted to local realities.

The question is no longer whether to adopt digitalization, but to define the conditions for structuring, financing and effectively deploying it at scale. Africa has a unique opportunity: to accelerate its transformation by directly building intelligent, inclusive and resilient systems. The real risk is not investing in digital technology, but failing to do so to the detriment of sustainability and universal access to water.

Outlook :

This webinar is the third in a series jointly organized by AfWASA and RAM WASH. Given the enthusiasm generated and the number of questions raised, a second edition will be organized to continue and deepen the exchanges on these topics of paramount importance for the African water and sanitation sector.

Report drafted by AfWASA & RAM WASH — May 2026
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