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# 15-POINT DIGITAL READINESS CHECKLIST FOR EAST AFRICAN WATER AND WASTEWATER UTILITIES

As water and wastewater utilities across East Africa modernise operations, digital readiness has become the defining factor in service reliability, operational efficiency, and long-term sustainability.

This checklist is designed for utility leaders, operations teams, and digital transformation stakeholders to assess how prepared their organisation is for modern utility operations. Score each point on a 1-5 scale, identify where gaps concentrate, and use the results to build a phased investment roadmap.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not started | Early stage | Partial | Operational | Optimised |

## SECTION 1 — VISIBILITY & DATA

*Can you see what's happening across your operation in real time?*

**1** — **SCADA and control system visibility**

When your operators can't see across treatment, transmission, distribution, and wastewater collection in one view, the first sign of a problem is often the problem itself — a burst main, an overflow event, a contamination risk.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**2** — **OT, IT, and ET data centralisation**

If your asset data, operational data, and engineering data live in separate systems, your team is making decisions with incomplete picture — every shift, every day. Non-revenue water and unplanned work downtime both trace back to this gap.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**3** — **Network monitoring and leak detection**

Fast leak localisation is the difference between a contained loss and weeks of unbilled water draining your revenue. If your team is still relying on customer reports or manual inspection to find leaks, you are always finding them late.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**4** — **Cybersecurity and OT network protection**

OT networks were not built with connectivity in mind. As treatment and distribution infrastructure digitalises, the attack surface grows. An incident response plan for cyber threats is now an operational requirement, not an IT concern.

Score 1☐ 2☐ 3☐ 4☐ 5☐

## Section 2 - ASSET & PROCESS PERFORMANCE

*Are you managing your assets — or are your assets managing you?*

**5** — **Predictive asset performance monitoring**

Reactive maintenance costs 3–5× more than predictive intervention. More importantly, it means your maintenance schedule is set by your assets failing.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**6** — **Remote operations and diagnostics**

In a network where treatment plants and pumping stations can be hours apart, remote diagnostics can be the difference between a same-day response and a multi-day outage affecting thousands of households.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**7** — **Energy and Pumping Optimisation**

Pumping typically accounts for 30–40% of a utility's operating budget. If your pump scheduling isn't informed by real-time demand, tank levels, and tariff windows, you are very likely overspending on energy without knowing by how much.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**8** — **Capital project delivery and engineering handover**

A new treatment plant or pump station that isn't properly handed over into operations is a liability, not an investment. If your engineering data, as-built records, and commissioning documentation don't feed directly into your operational systems, you're starting blind.

Score 1☐ 2☐ 3☐ 4☐ 5☐

## SECTION 3 — WORKFORCE & KNOWLEDGE

*Does your team have the competency to operate what you're building?*

**9** — **Digital skills and operation workforce readiness**

Technology investments fail without the workforce to operate them. In an environment where a wrong dosing decision or a missed alarm can affect public health, the gap between what experienced operators know and what newer team members have been trained on is a reliability risk.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**10** — **Simulation-based training and competency management**

Procedures on paper don't build operational muscle memory. If your team hasn't rehearsed contamination events, plant failures, or major leak scenarios on real system models, their first experience of a major incident will be the real thing.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**11** — **Emergency response and business continuity**

Your continuity plan is only as good as the last time you tested it. If backup systems and emergency procedures haven't been exercised under realistic conditions — power failure, flood event, equipment failure — you won't know what fails until you need it most.

Score 1☐ 2☐ 3☐ 4☐ 5☐

## SECTION 4 — INFRASTRUCTURE & STRATEGY

*Is the foundation in place for everything else to work?*

**12** — **Connectivity and network infrastructure**

Digital transformation assumes your sites are connected. If your treatment plants, pump stations, and remote facilities aren't reliably networked, other investments on this list are built on an unstable foundation.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**13** — **Billing, metering, and non-revenue water management**

Non-revenue water across the region commonly exceeds 35%, against a global best-practice benchmark of under 15%. If smart metering, district metered areas, and billing data aren't connected to your operational systems, this single gap is likely your largest source of lost revenue.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**14** — **Regulatory and compliance alignment**

As WASREB, EWURA, and Ugandas NWSC continue to raise performance and digital reporting requirements, regulatory scrutiny of utility operations is increasing. Digital performance reporting is no longer optional — it is increasingly a condition of funding and licence renewal.

Score 1☐ 2☐ 3☐ 4☐ 5☐

**15** — **Digital transformation strategy and leadership alignment**

A digital roadmap without executive ownership stalls at pilot stage. If your transformation goals aren't tied to operational outcomes that leadership reviews quarterly, the investment won't sustain past the first budget cycle.

Score 1☐ 2☐ 3☐ 4☐ 5☐

## What's your score?

Add your scores across all 15 points. Maximum total: 75. Review section totals as well as your overall score — a section total below 10 flags a priority area regardless of your overall result.

| Score | What it means |
|---|---|
| 60 – 75 | Strong foundations. Your utility is well positioned to layer advanced capability — predictive analytics, digital twins, and AI-assisted operations — on top of a solid base. |
| 45 – 59 | Operational gaps present. Identify the lowest-scoring section and build a prioritised investment plan starting there. |
| 30 – 44 | Significant exposure. A structured digital transformation roadmap is needed before advanced tooling will deliver value. |
| Below 30 | High risk. Foundational data, visibility, and workforce investments are required before any further technology deployment. |

## Section scores

| Section | Points covered | Max | Your score |
|---|---|---|---|
| 1 — Visibility & data | Points 1–4 | 20 | |
| 2 — Asset & grid performance | Points 5–8 | 20 | |
| 3 — Workforce & knowledge | Points 9–11 | 15 | |
| 4 — Infrastructure & strategy | Points 12–15 | 20 | |
| Total | | 75 | |

## Is Your Operation Ready?

If your score reveals gaps, AVEVA works with water and wastewater utilities across East Africa to build the operational foundations that make digital transformation deliver.

From reducing non-revenue water and improving asset reliability to enabling predictive maintenance and workforce readiness — AVEVA helps utilities build from where they are.

**Start the conversation at eastafrica.avevaselect.com**

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