



Turning Pain into Purpose:
How Africa Quantitative Sciences
is Leading a Data-Driven Future

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Hinda Ruton, CEO and Founder

"Throughout my career, I have witnessed the transformative power of data across the healthcare spectrum. From accelerating drug discovery and enabling precision treatments to driving evidence-based practice changes and policy reforms — data's impact resonates from local clinics to global health institutions. Now, with unprecedented computational power and artificial intelligence (AI)

amplifying our analytical capabilities, the potential for data to revolutionise healthcare has never been greater.

"When missing data delayed my son's autism diagnosis, I felt the pain of waiting and saw the cost of inaction. That's why I founded AQS – to turn data into a catalyst for swift, life-saving decisions, so no family or nation endures that delay again." -Hinda Ruton

THE BIRTH STORY OF AQS

"In 2022, I founded Africa Quantitative Sciences (AQS) with a singular mission: to close the gap between data and life-saving decisions. AQS harnesses data to accelerate life-saving decisions — because every delay costs lives. As a Six Sigma Black Belt and biostatistician behind clinical trials published in the New England Journal of

Medicine, I knew we could turn insights into action.

Today, AQS works closely with regional and national policymakers to avail critical insights that drive healthcare decisions. Our data-driven approach ensures that information is not just collected but actively used to improve

health outcomes. Moving forward, we are setting our sights on precision medicine, where data will play a pivotal role in tailoring treatments and advancing healthcare solutions. Because in a world where every second counts, data shouldn't just inform decisions — it should drive them."

Our Impact in Action

- Developed Data goatAI to simplify analytics access
- Data goat cut diagnosis times by 40 percent in partner clinics.
- HEIS boosted Rwanda's horticultural exports by 20 percent in under a year.
- Supported 603 health facilities in 14 days

- Delivered antibiotic surveillance support at Kigali University Teaching Hospital (KUTH)

At AQS, we do not dwell on challenges — we build solutions, because when data is accessible, connected, and actionable, possibilities are not just imagined — they are realized.

The journey to a data-powered Africa has begun. Join us in shaping a future where innovation leads, and data transforms lives.

Rwanda's Digital Health Transformation: The Power of Data in Action

In an era where data drives decisions, Rwanda sought to

strengthen its digital health system with real-time insights. Partnering with Resolve to Save Lives (RTSL), we conducted a nationwide survey of 603 health facilities in just 14 days, delivering key findings that informed national strategy, healthcare operations, and long-term sustainability.

Key Outcomes

A Data-Driven National Strategy

–The Ministry of Health integrated findings into its digital health roadmap, ensuring a structured and informed approach.

Hospitals Accelerated Digital Adoption

– Healthcare facilities leveraged insights to enhance patient records, expand telemedicine, and improve service delivery.

Sustainable Digital Health Growth

– JHU's economic evaluation introduced scalable, cost-effective models to support long-term implementation.

At AQS, we believe research should lead to action. By ensuring data is both accessible and actionable, we support the ongoing transformation of Rwanda's healthcare system — one informed decision at a time.

MEAL: Precision in Monitoring and Evaluation

In high-stakes leadership, **guesswork isn't an option**. Yet too many organisations rely on outdated reports, fragmented data, and reactive decisions.

Eval360 redefines project governance. With **real-time monitoring, automated risk detection, and KPI-driven insights**, it transforms oversight into a **strategic advantage**, ensuring leaders stay ahead, not just informed.

Built for **scalability and executive precision**, Eval360

offers a **single source of truth**, empowering **faster, smarter, and more confident decision-making**.

Because leadership isn't about keeping up — it's about staying ahead. **Eval360 makes that possible.**

NextGen: From Research to Real-World Breakthroughs

We don't just publish research — we turn insights into action. Game-changing discoveries happen daily, but without the right tools, they risk being confined to journal pages.

At AQS, we're training the next generation of researchers through the NextGen Researcher Fellowship, empowering healthcare professionals to turn data into impact. Over 12 intensive weeks, fellows master qualitative, quantitative, and mixed-methods research using DataGoat, AQS's AI-powered platform that transforms raw data into actionable decisions.

The results are already shifting the landscape:

- Trained 73 fellows across five countries

- 20 secured jobs in data leadership roles
- Ongoing regional collaborations

"With the next cohort underway, NextGen isn't just a fellowship — it's the talent pipeline that will define the future of medicine."

HEIS: A New Chapter for Rwanda's Horticultural Exports

Rwanda's horticultural sector is growing fast, but efficiency, financing, and logistics remain critical to scaling exports. At AQS, we saw an opportunity to bridge these gaps with the Horticultural Exporters Information System (HEIS), a platform designed to bring structure, transparency, and accessibility to the industry.

Instead of managing contracts, compliance, and yield tracking across scattered systems, HEIS simplifies the entire process, giving exporters real-time visibility over their operations. With this data, financial institutions can assess performance more accurately, making financing more accessible to businesses ready to scale. Logistics also becomes smoother, with





better yield tracking ensuring shipments are planned with precision, reducing delays and strengthening reliability in international markets.

Almond Green Farm is among the first to integrate HEIS into its operations, leveraging the platform to streamline exports and improve market reach. With 20 percent of Rwanda's exporters already onboarded, momentum is building.

As more businesses adopt HEIS, Rwanda's horticultural exports are becoming more structured, efficient, and globally competitive.

Partner with us to scale Rwanda's horticultural export model to your region.

Strengthening Data Protection and Regulatory Alignment

The way organisations handle data today shapes their credibility tomorrow. At AQS, we provide compliance services that establish clear

accountability, strengthen data governance, and proactively manage risk — ensuring organisations stay ahead of regulatory changes.

We have delivered compliance solutions for healthcare institutions, NGOs, and innovation hubs, refining policies so regulations are understood, applied, and seamlessly integrated into daily operations. Our risk assessments identify vulnerabilities before they become liabilities, reinforcing security at every level.

With direct engagement with regulators and advisory bodies, we enable organisations to navigate policy shifts smoothly and maintain compliance without disruption. Whether refining governance structures, training teams, or preparing for regulatory changes, AQS provides the expertise needed to operate confidently in an increasingly data-driven world.

Get in touch to explore how AQS can support your data governance journey.

HRET: Bringing Clarity to Healthcare Financing

In healthcare, funding alone isn't enough—visibility and strategy make the difference. When multiple funders invest in projects without coordination, critical resources get stretched thin, budgets become difficult to track, and impact is reduced. That's where the Health Resources Expense Tracking Tool (HRET) comes in.

Developed by AQS for the Ministry of Health of Central Africa, HRET provides a real-time, centralised system that tracks every funder, project, and expenditure. This ensures that healthcare investments are aligned with national priorities, eliminate redundancies, and maximise impact.

With HRET, decision-makers can:

- ✓ See precisely where funds are going and who is involved.
- ✓ Avoid duplications, as every project serves a distinct need.

- ✓ Optimise budgets based on real-time financial insights.
- ✓ Coordinate effortlessly between funders, executing agencies, and policymakers.

By integrating HRET, the Central African government is making smarter, data-driven investment decisions that strengthen healthcare infrastructure and improve long-term planning.

In a sector where every decision impacts lives, HRET transforms financial complexity into a clear, actionable strategy.

"AQS's HRET turned our budget chaos into a clear strategy — every dollar now saves lives."

— Dr. Noelly Douma, Ministry of Health, Central African Republic

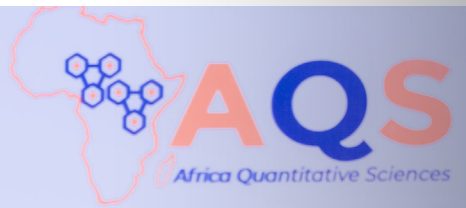
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