

Scalable, digital industrialisation for African realities



As Africa accelerates its industrial growth, digital transformation is no longer a strategic luxury, but an operational necessity. Yet across the continent, industrial modernisation must contend with legacy infrastructure, constrained budgets, variable connectivity and skills shortages. Against this backdrop, proudly South African industrial software leader Adroit Technologies continues to demonstrate how innovation, when designed for African realities, can deliver scalable and sustainable industrial transformation.

Building on more than three decades of industrial automation expertise and over 35 000 installations worldwide, Adroit Technologies has positioned itself as a proudly South African software developer delivering advanced SCADA, IIoT, MES and cloud-enabled solutions tailored to local conditions. Through its flagship Adroit SCADA platform, the Mitsubishi Adroit Process Suite (MAPS), and the Adroit Edge Gateway, the company is redefining how African industries capture, contextualise and leverage operational data.

Engineering digital resilience for African operations

Industrial operators across Africa face a distinct challenge: how to modernise with-

Purpose-built automation platforms, edge-to-cloud connectivity and integrated process intelligence are enabling African industries to modernise sustainably without sacrificing existing infrastructure investments. Johan Nieuwenhuizen, Sales Director and co-CEO of Adroit Technologies, explains.

out replacing entire infrastructures. Many plants operate in hybrid environments where modern programmable logic controllers co-exist alongside legacy systems that remain mechanically reliable but digitally isolated. Wholesale system replacement is often neither economically viable nor operationally prudent.

Adroit's architecture is specifically designed to integrate new and legacy systems within a unified supervisory environment. Through native support for industrial communication standards such as OPC UA, MQTT and Modbus, as well as high-performance, dedicated drivers for leading automation platforms from Mitsubishi Electric, Schneider Electric, Siemens and Allen-Bradley, the platform delivers a robust, standardised abstraction layer between field devices, control systems, and enterprise applications. This allows organisations to progressively digitise operations while preserving previous capital investments.

Equally important is the company's licensing model. Rather than charging per client or imposing restrictive internal I/O limits, Adroit licences are structured around real data points, with unlimited internal input/output processing and concurrent client access.

This ensures that operational requirements rather than licensing constraints govern system expansion. When combined with Rand-based pricing, the approach mitigates foreign exchange exposure and provides predictable total cost of ownership for African industrial operators.

Advanced SCADA built for performance and scale

At the core of Adroit's ecosystem lies a high-

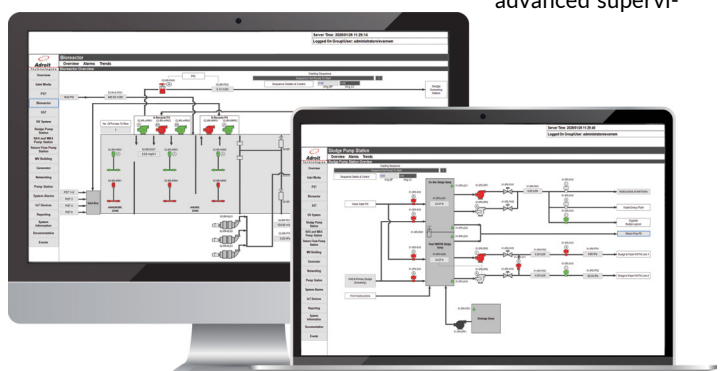
performance Supervisory Control and Data Acquisition (SCADA) platform engineered for distributed, high-demand industrial environments. The system supports clustered architectures and central OPC server configurations, enabling high availability and redundancy in mission-critical applications such as mining, water treatment and energy generation.

The platform is capable of high-speed data acquisition and deterministic processing across extensive tag databases, ensuring time-sensitive industrial processes are monitored with precision. Integrated alarm management and event handling systems provide structured escalation pathways, historical logging, and compliance-ready audit trails, supporting both operational responsiveness and regulatory reporting requirements.

Historian integration enables long-term data archiving and advanced trend analysis, transforming transient process variables into actionable operational intelligence. Multi-user concurrent access ensures that operations personnel, maintenance engineers, and executive management can simultaneously interrogate live and historical datasets without degrading performance. This scalability allows a single architecture to support both plant-level control rooms and enterprise-wide visibility across multiple geographically dispersed facilities.

Mitsubishi Adroit Process Suite (MAPS)

As co-developer of the Mitsubishi Adroit Process Suite (MAPS), Adroit has extended its innovation into a tightly integrated automation ecosystem that combines Mitsubishi Electric's hardware capabilities with Adroit's advanced supervi-



Left: Adroit Technologies plays a vital role in sustainable and inclusive industrial development in Africa. Right: At the core of Adroit's ecosystem lies a high-performance Supervisory Control and Data Acquisition (SCADA) platform engineered for distributed, high-demand industrial environments.