LAGONI
INNOVATIVE ENGINEERING SOLUTIONS

Lagoni has a wealth of experience in design, integration and delivery of Industrial Control Systems (ICS) that aggregate and harvest data from a multitude of sources. We continue to use our engineering expertise to solve data integration, security and operational challenges on behalf of our clients. This expertise allows our clients to break from a traditional single-asset view to intelligent, real-time asset management; a key step towards the adoption of Industrial Internet of Things (IIoT).

Our engineering services are based upon the foundation of process and functional safety, all of which has been used to underpin our IIoT offering. Lagoni possess an abundance of expert knowledge in Operational Technology and Cyber Security within the context of critical national infrastructure industries.

Lagoni are able to utilise our engineering knowledge to ensure that data is both insightful and intelligent.

INDUSTRY 4.0
Digital Transformation

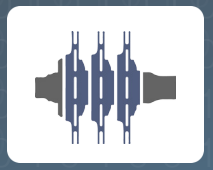
Why IIOT?

- The opportunity to combine operational engineering knowledge with ICS expertise to add true value to the industrial world & harness additional value from data.
- It paves the way for using new tools and techniques with an existing install base to increase productivity, reduce costs, effectively plan maintenance and improve safety.
- IIoT has a primary requirement to secure against cyber attacks.
- Industrial Automation and Operational Techology is vastly different in setup and architecture to that of traditional IT, therefore requires a different approach to maximise both value and safety.
- The cost of hardware continues to decline rapidly, enabling ever more cost-effective sensor-to-cloud connectivity.

Our Approach

- We offer proof-of-concept services at minimal cost with the necessary functionality, to help identify and quantify the IIoT value proposition specific to each client.
- We design and provide the infrastructure to enable a cost-effective adoption of IIoT.
- Our solution is staged upon an IIoT purpose-built platform, EniWARE, which is open-source licensed and delivers sensor-to-cloud connectivity.
- We can provide clients with private on-premise cloud infrastructure depending on their data deployment strategy.
- EniWARE is cyber secured from the ground up, incorporating Edge and Cloud Cyber Security counter-measures in accordance with international standards.
- We work with higher education bodies to continue expanding an open source community to support application development and cloud enhancement.

Case Studies



Compressor Seal

Reliability use case: Sensor, Edge and Cloud deployment. Analytics in the cloud predict seal end-of-life to optimise maintenance.

Sulphur Treatment

Production use case: Sensor, Edge and Cloud deployment. Analytics in the cloud predicts batch process optimisation.

HIPPS Monitoring

Safety Compliance use case: Sensor, Edge and Cloud deployment. Risk & compliance evidence provided in the cloud for HSE Reporting

HV Fault Detection

Pre-emptive fault detection use case: Sensor and Edge deployment. Machine Learning on the Edge identifies faults early.