



Case Study

From vision to reality: A game-changing impact on asset health

The On Key team and solution contributed tremendously to shaping the vision of an Asset Health Management service into a tangible reality. They integrated with the project team and, through close collaboration, fully understood the task at hand and delivered exceptional results.

Morne Steenkamp – Manager: Asset Health Services

Asset health services technology enabler

Cost savings from streamlined operations

Key challenges

The team intends to monitor hundreds of generators from a single control room. If smart technologies aren't used, this becomes a significant operational and asset health risk mitigation challenge.

The volume of assets that will be monitored and managed by the team makes it difficult to manually trigger maintenance actions based on the health status of a generator.

Each generator's asset care plan (ACP) must be centrally maintained and updates synchronised to all generator instances.

Contractors need to be managed and controlled effectively.

Work management needs to be effective and efficient, and work feedback must be accurate and immediately available for analysis.

The business unit must guarantee asset reliability and availability of its clients' critical assets.

Our intervention

- On Key provided the entire IIoT technology stack, including the hardware, visualisation platform, external database integration, and EAMS capability.
- A trained contractor installed the hardware to collect data from Deep Sea-type generator controllers. The On Key team supported this by testing and commissioning the solution.
- Dashboards were developed to visualise and present the generators' realtime data.
- The On Key team assisted the client in developing a template-based comprehensive ACP for generators to manage and maintain centrally and easily deployed to hundreds of sites. The ACP also includes technology-driven tasks, such as monitoring point entities that capture realtime data, trigger alarms, and create work orders.
- An automatic export service was created to export specific realtime data to an external SQL database for analytics purposes.

Value add

- Asset availability
- Prioritise risk management
- Effective fuel management
- Improved business sustainability
- Efficient and effective maintenance enabled by comprehensive and smart asset care plans
- Cost savings as a result of contractor invoice validation
- Better decision-making made possible through realtime data and business intelligence
- Reduced human error
- Automated work identification enabled by IIoT technology and EAMS integration
- A digital twin is established from a combination of data sources and tools such as IIoT dashboards and hardware, failure history and maintenance costs captured by an EAMS

Client background

- The Asset Health Services business unit within Pragma delivers asset-type specific health management solutions for business-critical assets.
- A dedicated team of specialist engineers help their clients to optimise asset health through the implementation of the necessary predictive asset management business processes aided by using smart technologies, such as IIoT.
- The initial implementation was on a regional-wide backup power generator implementation. The plan is to expand the offering into other crucial asset types.

