

CASE STUDY

Revolutionizing Daily Shift Logs & Handovers: Stanwell's Digital Transformation Journey with Asset Intellect

At a glance

Industry

Power Generation

Product

Asset Intellect's Shift Log and Handover System

Stanwell is a leading provider of electricity and energy solutions, supplying power to Queensland, the National Electricity Market, and major energy users across Australia. The company owns and operates two coal-fired power stations – the Tarong power stations and the Stanwell Power Station – along with the Meandu Mine.. These sites play a crucial role in ensuring reliable power supply and operational efficiency across the region. For over a decade, they have utilized the PI System for advanced performance degradation alerts, process safety compliance KPIs, and environmental monitoring and compliance.

Challenge

At the beginning of 2020, Stanwell embarked on a journey to replace an ageing shift log system at one site, and significantly upgrade a similar system at another. The system, developed over a decade ago, relied on outdated technology that was no longer supported. As both the system and the business evolved,

keeping the software up-to-date became increasingly challenging. This resulted in operational inefficiencies, increased risk of data loss or corruption, and difficulties in meeting regulatory compliance. With a scattered shift log and handover system, it was difficult to locate information relevant to each shift. Stanwell needed new technology that could meet regulatory obligations, integrate seamlessly with core business systems, and, most importantly, be user-friendly.

Solution

Asset Intellect's Shift Log and Handover System was chosen due to its ability to integrate and centralize disparate data systems such as the Ellipse ERP, Document Management, and PowerBI into a unified platform, as well as its seamless integration with PI.

GTSgroup, Stanwell's trusted technology partner, worked alongside Dimension Software, to ensure the project was delivered on time and within budget.

**"We have been really impressed
with how quickly the solution
has been rolled out"**

Karl Rickards

Performance Analytic Specialist,
Stanwell Corporation

PI System: One of the essential tasks for process technicians, also known as panel operators, is performing routine checks to ensure their units are safely set up and operating under optimal conditions. After taking over a shift, technicians can view HMI settings in one view through PI AF Attributes, providing a comprehensive snapshot of the unit's status.

PowerBI Integration: A Gantt view can be used to monitor unit outages and output reductions throughout the day. By clicking on individual units, users can drill down into each unit to view detailed information such as equipment and the personnel responsible. The asset hierarchy facilitates easy access to critical data like process control sheets, drawings, and operating instructions.

Asset – Relevant Documents linked from EDRM: Referenced relevant drawings, process control sheets, and operating instructions are available within their Electronic Document and Records Management System, which are contextualized under each specific asset within the hierarchy.

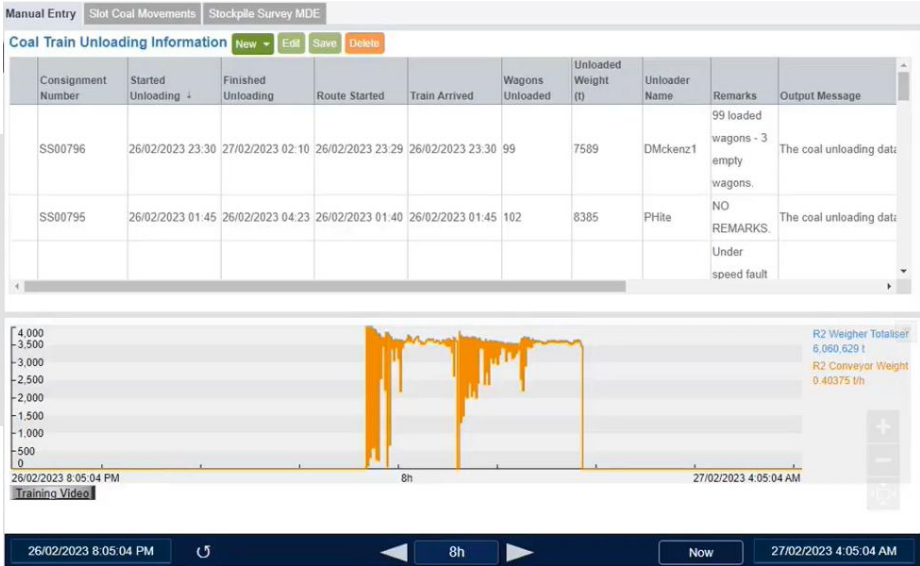
ERP Integration: This integration allows Stanwell to view a filtered shift log, directly integrating with ABB Ellipse to display open work requests. This provides visibility into dates of creation, current status, details regarding specific work requests, and priorities associated with each request.

Manual Data Entry: Asset Intellect added a combination of the attribute editor, where data can be entered directly into PI Asset Framework. Technicians can now input timestamps, consignment note numbers, and other relevant details for fuel deliveries directly into the PI Asset Framework. Once submitted, this data is pushed into the SQL database, where it can be used for further analysis and reporting.

Shift Handover Report: A crucial aspect of any digital shift log is the ability to produce a comprehensive summary at the end of each shift. Asset Intellect automatically incorporates data from the PI system, offering an accurate and detailed record of shift activities and the plant's status during handover. This functionality ensures that the incoming shift is fully informed and can continue operations smoothly.

To keep all stakeholders informed, the system utilizes PI notifications to send automated summaries to both internal and external parties. This includes route delivery companies and mining operations, ensuring that everyone is up-to-date with the latest information.

Asset Intellect replaced scattered manual notes for coal loading and unloading with direct worker input of timestamps, which are integrated into a PI Vision display.





Stanwell now has a **streamlined view** of their daily operations, enhancing **visibility**, facilitating quicker **issue identification**, for a **smoother shift handover**.

Results

Asset Intellect's Digital Shift Log and Handover system has significantly transformed Stanwell's daily operations with a streamlined view of their daily operations, enhancing visibility, facilitating quicker identification of issues, and ensuring a smoother shift handover process.

In addition to robust features for shift management, Asset Intellect effectively addressed long-standing challenges related to data accessibility in industrial operations. Improved communication among stakeholders about ongoing tasks, issues, and priorities ensures operational continuity and reinforces accountability throughout each shift.

Since Asset Intellect's deployment, users are producing more ideas on how it can benefit other parts of the business. The PI Asset Framework's contextual filtering capabilities enable Operators, Engineers, and Managers to swiftly access relevant information and make informed, data-driven decisions. This enhanced visibility has greatly improved operational oversight and streamlined business processes.

Looking ahead, Stanwell has several upcoming projects with Asset Intellect, which they look forward to announcing in the future. The collaboration with Dimension Software and GTSgroup has been instrumental in expediting these projects.

“Asset Intellect has addressed the paradigm of “where is my data?” that has challenged industrial operations for years”

Karl Rickards

Performance Analytic Specialist,
Stanwell Corporation