

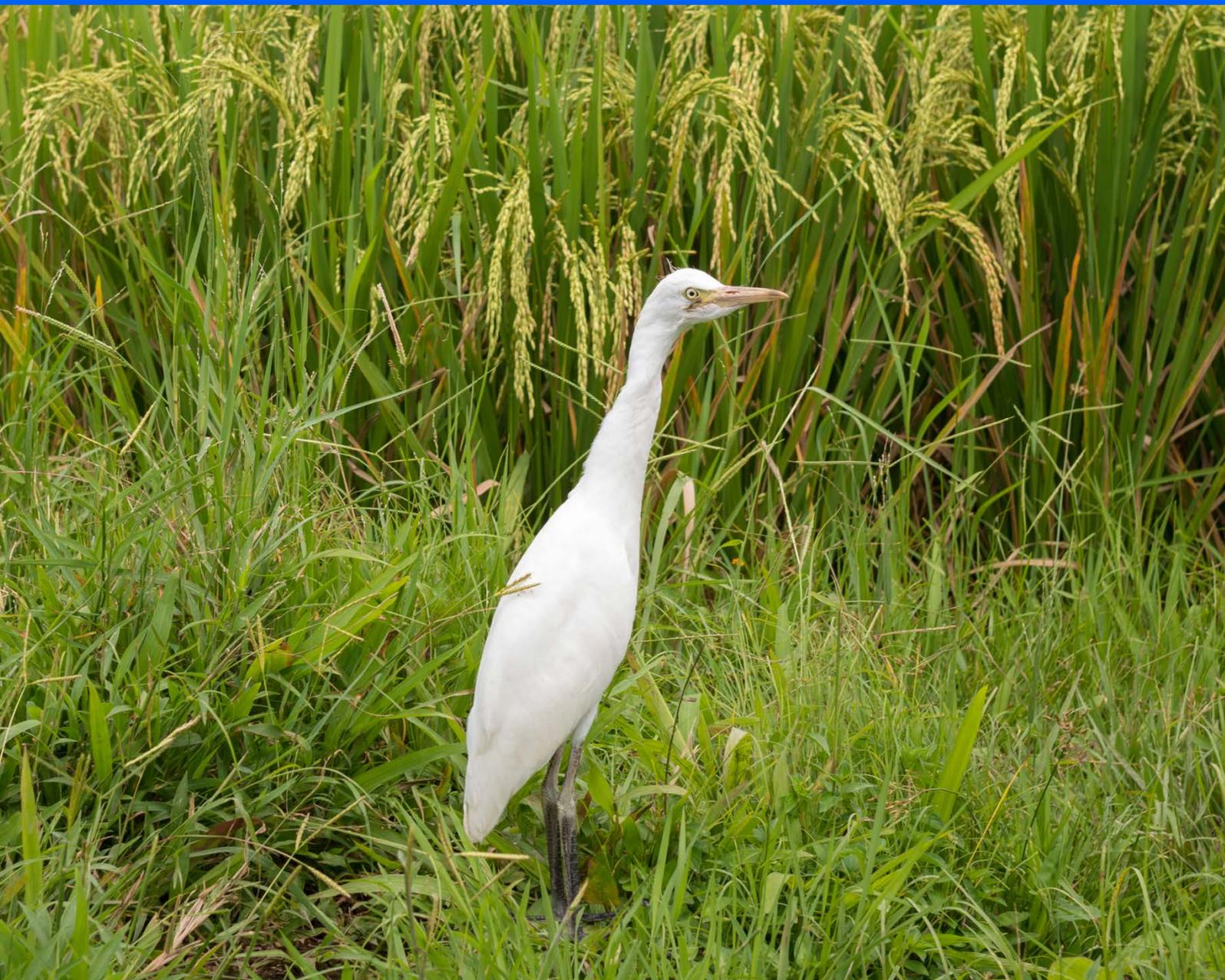
Anding Water Authority

Case Study

Wetlands area monitoring and workflow management

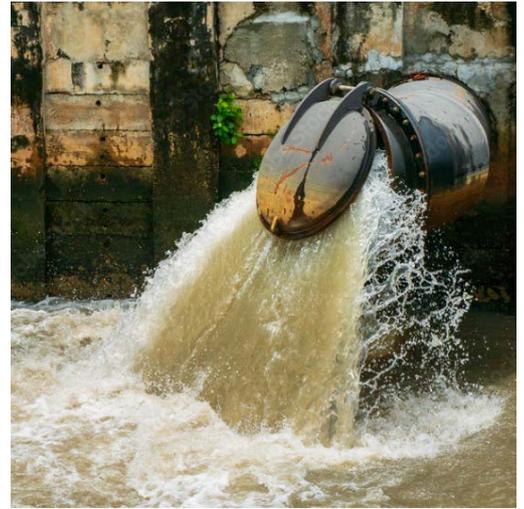


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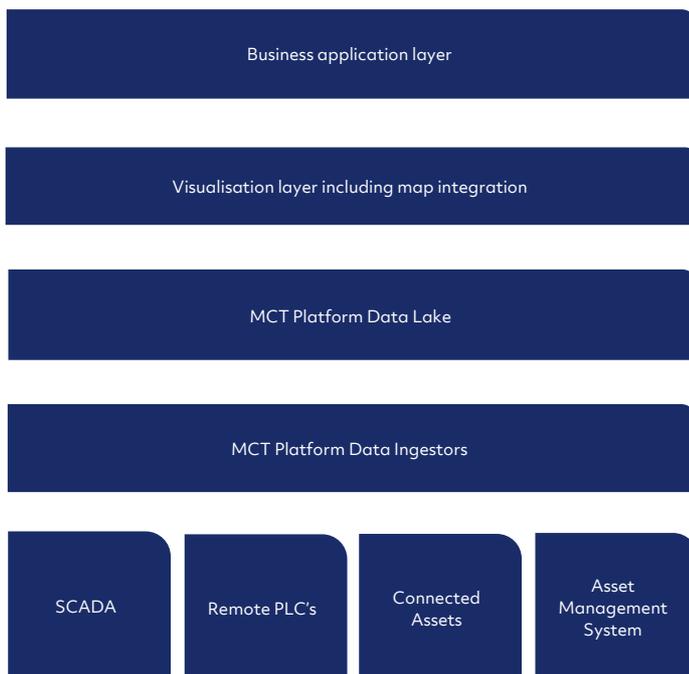
Wetlands Monitoring and Workflow Management

The population in rural areas is widely distributed with no associated sewage pipeline network. Typically, domestic sewages are poured along the streets or discharged into rivers/streams directly. Discharging untreated sewage into rivers and streams worsens water quality and pollutes groundwater after penetration. The mixed rainwater and sewages increase the workload of sewage treatment and processing.



The Brief

The Anding Authority Established Wetlands areas surround their water treatment plants to provide tertiary treatment of water through the natural removal of organic matter by vegetation. The wetland areas are monitored and controlled via remote telemetry, PLC's, as well as other connected assets. Due to the decentralization of the network and diverse nature of assets the client required a single platform solution to aggregate all data sources, visualise and control assets remotely.



Our Strategy

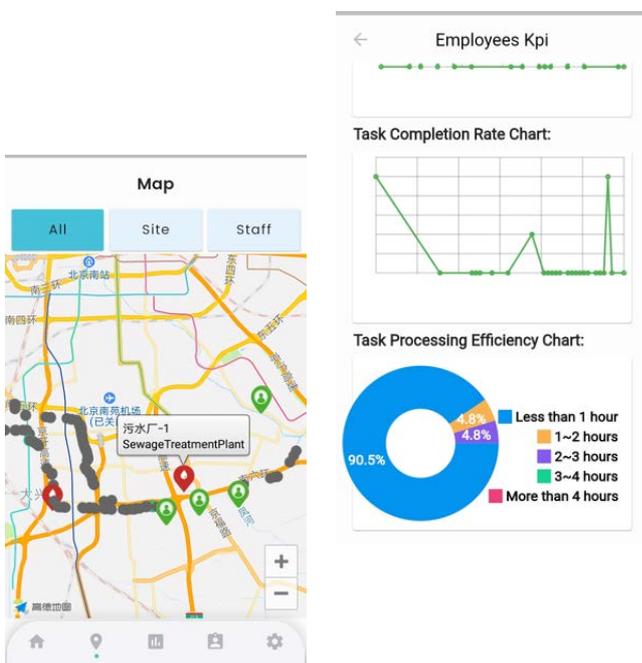
CT deployed its MeridianCT (MCT) IoT platform to monitor and manage the network of wetland areas.

Starting by aggregating the client's siloed systems data, which included, water quality stations, remote PLC's, SCADA and asset management system into the MeridianCT platform.

CT then created a customised dashboard with an integrated map visualisation layer.

Application & Visualisation Layer

The MeridianCT platform ingests data from a centralised SCADA system and remote distributed assets at the wetland areas. It provides a single pane view of all connected assets via a GIS layer, allowing for easy navigation and visualisation of critical parameters, and improved monitoring of vegetation health within the designated wetland areas.



Mobile Application Workflow Management

When the MeridianCT system detects poor water quality outside the expected range or equipment anomalies, the system will trigger alerts and assign work orders via the mobile application to authorised executors, so corresponding actions can be taken. All work order and maintenance tasks are stored within the MeridianCT platform and tracked against KPI's to ensure the highest level of service is maintained.

The MeridianCT platforms allows operations to monitor data with a variety of dashboards, as well as facilitate remote equipment control. In addition, data will be kept within the MeridianCT platform allowing Anding Water Authority to conduct statistical analysis, as well as develop data analytical models, ultimately providing the tool for better ecological management.

Transformation

Anding Water Authority is able to better visualise and manage 19 wetlands areas and other remote assets within their control, and save costs in operations and maintenance. They are able to form management decisions on the basis of scientific data, ultimately contributing to their environmental goals.





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