Heritage Site and Museum

Once a lookout and communication hub for the Aboriginal people, it's now home to a historic station established in 1912. The museum, housed in the original Engine Room, hosts exhibitions, talks, and educational programs. Spread across a large reserve, the facility needed a solution to improve management efficiency and maintenance of the overall area.

Aim:

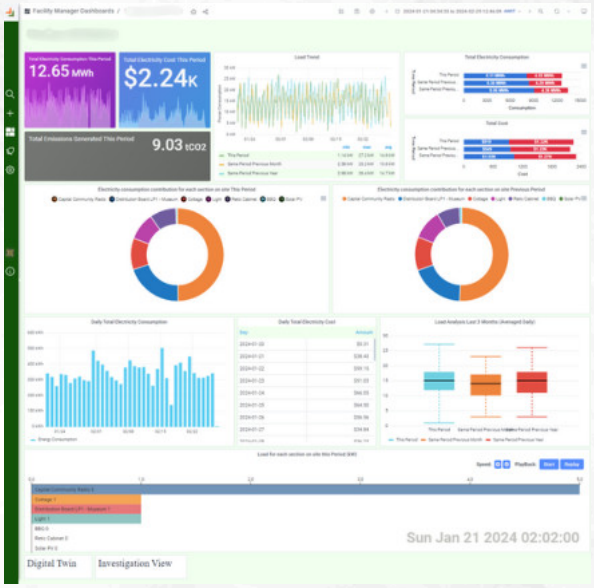
To streamline facility management, maintain infrastructure, and boost power efficiency with solar PV integration. To optimize facility and technology performance by application of relevant smart technologies.

Challenges:

- Energy resource management
- Asset condition monitoring and building health monitoring
- Visitor comfort and sustainable development

Solution:

- The solution integrated solar PV systems alongside other technologies to form an effective smart grid, enabling efficient energy distribution and reducing resource wastage. Real-time data analysis and energy insights were streamlined through CCR's AI-enabled advanced analytics platform.
- By harnessing AI and Machine Learning, predictive maintenance and condition monitoring were implemented, which reduced unnecessary downtime.
- Implemented a cutting-edge digital twin facility for streamlined community management. Utilizing digital twin technology, a 360° virtual tour was developed enabling visitors to experience the museum, memorial, events, and gatherings online.
- Sensors and cameras were installed throughout the facility to manage all aspects of its indoor environment including visitor comfort and safety through its advanced people counting and video analytics solution.



Network:

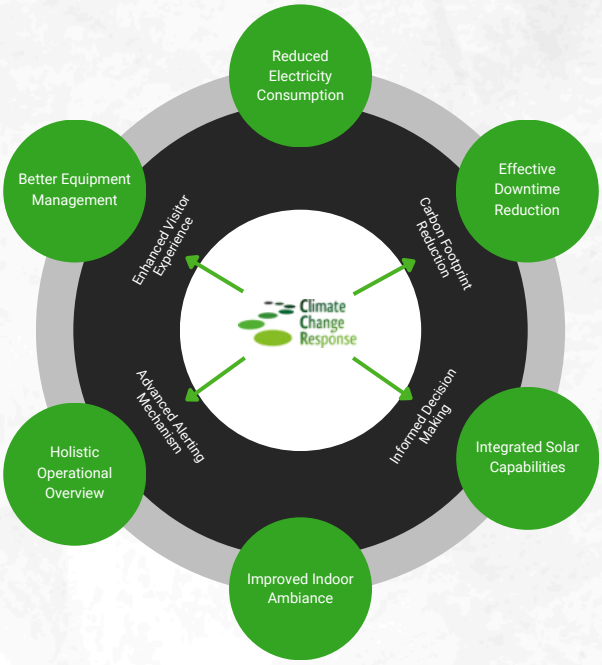
Modbus, Bacnet, 4GLte, LoRa, LoRaWAN, Ble.

Scope of Expansion:

- Implementing CCR's smart parking management systems and street lighting ecosystems to ease parking around art exhibits and local museums.
- Enhancing waste management and disposal through CCR's smart waste management solution.
- With CCR's sensors and real-time ecosystems, analyzing energy consumption within a space progresses towards efficient resource management.
- CCR's smart video analytics and surveillance systems further facilitate the management of large open spaces requiring constant surveillance.

Success Criteria:

- Improved energy efficiency and reduction in wastage.
- Enhanced visitor comfort.
- Asset management and monitoring of building health.
- Reduced utility and maintenance costs



Key Outcomes

Enhanced Energy Efficiency and Minimized Wastage	**Improved Revenue Through Virtual 360° Tours**
Reduced equipment failure rates	**Real Time Asset Monitoring And Management**