



Commercial Facility Melbourne, Australia

Al-based IoT Platform for Energy, Facility and Equipment Management

Project Background

Reviving the heart of Melbourne's Western Precinct, this commercial facility is one of Australia's largest commercial complexes. Out of the total six towers, this tower accounts for 40,000sqm.

Pulling real-time data from 40,000 data points, the AdOPT AI engine enables smart services such as predictive maintenance & continuous commissioning to enhance sustainability, operations efficiency, and tenant satisfaction.



Commercial building, Melbourne, Australia.

Value Matrix

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Maintenance Cost

Annual saving \$284,488

- Faults such as abnormal staging of equipment and oscillation of actuators significantly shorten equipment life length, and as a result, additional maintenance cost or even replacement will be required during the life cycle of properties and facilities.
- Detecting these faults in real time, predictive maintenance enabled by AdOPT's AI Engine effectively extends equipment life and significantly mitigates downtime uncertainties.
- Savings from avoided maintenance and extended life span will accumulate to \$284,488per year.



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Energy Use

Annual saving \$98,496

- AdOPT platform helps the facility identify a considerable number of energy saving opportunities in an automatic and continuous way.
- Besides detected faults that waste energy, operation sequence will be analyzed for the past 24 hours and predicted for the next 24 hours, aiming to optimize energy performance.
- Annual energy savings of \$98,496 can be achieved for Tower 4.

Operational Efficiency

Annual saving \$42,765

- A variety of reports are automatically generated for the management team. They not only visualize operation issues for their daily management such as weekly meeting with contractors, but provide intelligence for decision-making on long term strategies such as capex and maintenance programs.
- The digital workflow drives the operation with unprecedented efficiency when it automatically transforms diagnostics into actions and monitors them in a closed loop.
- \$42,765 will be saved annually from the improved operational efficiency, however, this amount may increase dramatically over time as AdOPT integrates into the facilities operations.

Overall Benefit

- Operation efficiency is improved and man-hours saved during daily operation.
- Accurate and real time fault detection optimizes the maintenance, extends the equipment lifecycle and reduces energy use.
- Overall cost saving achieved so far is \$425,749.
- In addition to this, there will be great value from enhanced tenant satisfaction, improved sustainability scores and continuous automation.

