

Data analytics to drive efficiencies at 35 Clarence Street, Sydney

CASE STUDY

CLIENT: Challenger Investment Partners (CIP)

PROJECT: Data analytics implementation to drive:

- BMS upgrade commissioning
- BMS and HVAC data-driven maintenance delivery
- Day to day building operation optimisation
- Grosvenor Cyber Solutions Tempered Airwall for cyber security on the analytics platform

KEY CHALLENGES:

- Ensure the BMS upgrade meets the high-level operational and compliance standards within defects liability period
- Improve visibility and control of HVAC, BMS and EMS systems
- Reduce operational costs by minimising breakdowns, enabling data-driven maintenance and reducing utility consumption
- Working in a secure state-of-the-art technology environment
- Engaging with multiple operational and maintenance contractors

OUTCOMES:

- ✓ 24/7 monitoring of multiple sources of operational data
- ✓ Standardised semantic data models were applied
- ✓ Data-driven commissioning, maintenance and optimisation was implemented
- ✓ Reduced resource consumption equating to 17,000 AUD per year (Energy 431 kWh/day & Water 8.4 kL/day)
- ✓ Provided the operation centre with remote maintenance and issue resolution capability
- ✓ Secure cyber security for analytics access

[The Client/Building

Challenger Limited is an ASX-listed investment management firm managing \$85 billion in assets (as at 30 June 2020). One of CIP's assets is 35 Clarence Street in Sydney which is a 20-storey commercial office building comprising two floors of retail, three levels of basement parking and 15 upper levels of office space. The lower ground floor provides a child care centre, with a large café restaurant on-site and a 24-hour gym.

Its flexible, central core floor plate and island like location, provides superior natural light on three sides and maximises the impressive 270-degree views to the Harbour Bridge and Barangaroo. Upgrades have enabled the building to now achieve a 5 Star NABERS energy rating.



[What We Did:

Grosvenor worked with a BMS contractor to ensure analytics ready BMS upgrades were implemented. The company followed cybersecurity “best practice” to mitigate risks associated with connected Operation Technology (OT) and its data. Using innovative data technology, Grosvenor captured and monitored the performance of all available HVAC, BMS and EMS assets on a 24/7 basis.

Running algorithms on top of the collected data and applying an integrated workflow, enabled the business to raise and allocate actionable insights to the contractor for implementation. Through Grosvenor’s operation centre, multiple insights were reviewed and resolved remotely which eliminated potential breakdown and reduced site visits. The outcomes enabled the client to adopt a pro-active approach and drive down utility consumption and breakdowns.



Grosvenor has an 11-year working history on the building which made them an ideal choice to expand with and utilise their historical knowledge. CIP has invested in intuitive data analytics to further drive efficiencies for tenants and create better working conditions for customers. Grosvenor’s pro-active approach to create efficiencies at 35 Clarence Street makes them an ideal contract partner.

Frank Tarrant

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