

# **Case** Study

## HUAWEI Campus HangZhov, China

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

## **Project Background**

HUAWEI Campus is located in Hangzhou, China and encompasses about 310,000 Sqm.

There are multiple systems and equipment within HUAWEI and the total data points utilised is 42,000.

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



Airscape of HUAWEI, located in Hangzhou, China

## Value Matrix



### Maximum Demand Optimization

#### Annual saving \$83,953

- Maximum Demand is vital for the instantaneous power requirements. If this instantaneous power is higher than the Maximum demand, the extra fees will be charged for the excess part. But if the power is lower than the maximum demand, the gap between them will be wasted.
- Taking the outside air temperature and historical maximum demand into consideration, optimal maximum demand will be predicted by AdOPT's AI Engine.
- For HUAWEI, savings from maximum demand optimization will accumulate to \$83,953 per year.



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### Energy Use

#### Annual saving \$405,640

- AdOPT platform helps HUAWEI 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 \$405,640 can be achieved for HUAWEI.

### **Operational Efficiency**

#### Annual saving \$72,789

- A variety of reports are automatically generated for the management team of HUAWEI. 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 HUAWEI's operation with unprecedented efficiency when it autonomously transforms diagnostics into actions and monitors them in a closed loop.
- \$72,789 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 extends the equipment lifecycle and reduces energy use.
- Maximum demand optimization predicts the maximum demand and optimize the energy use.
- Overall cost saving achieved so far is \$562,382.
- In addition to this, there will be great value from enhanced tenant satisfaction, improved sustainability scores and continuous automation.

