

CASE STUDY

VICTORIA UNIVERSITY

RUNNING ANY FORM OF ACCOMMODATION BUSINESS WITHOUT DATA TO TELL YOU WHAT IS HAPPENING IS CHALLENGING... LET ALONE 60 STUDENT FLATS

STUDENT CARE AND HEALTHY LIVING ENVIRONMENTS ARE CRITICAL DRIVERS FOR THE VICTORIA UNIVERSITY STUDENT ACCOMMODATION TEAM.

The team were reactive, relying on random site visits to manually test each heat pump and check for mould growth. There was simply too much to do and not enough time or resources to manage the properties efficiently.

They needed to know:

1. What's actually happening in each property?
2. How can we measure the effectiveness of changes we make?
3. Which properties are operating more effective than the other?
4. What actions should we take to improve the health and cost efficiency of the portfolio?



Problem - Keeping on top of mould which affect student health and incur commercial cleaning costs.



Problem - Reduced AC unit lifespan due to overuse or misuse in attempts to provide a healthy environment.



Problem - Inefficient energy use of devices leading to increased energy consumption which means larger energy bills.

ACTIONABLE INSIGHTS

For Victoria University we implemented Climate monitoring and control, Environment Monitoring and Electricity Usage monitoring.

We installed devices in 14 occupied properties with data collected and presented via the Blackcurrent Platform.

The team now had near real-time visibility for each location, which allowed them to plan and prioritize maintenance schedules without a team member having to visit each and every room. Once the data started to flow in, the team could see patterns forming immediately...

KEY FINDINGS

The heat pumps were being used 22-24hrs per day and were set to high target temperatures that the unit couldn't reach.

There was a higher chance of mould in a number of bedrooms than expected.

The data provides previously unavailable fact-based insight on the impact of insulation, heating or ventilation changes which enables proactive maintenance.

The data collected allows the student accommodation portfolio to integrate with the University's wider Energy Management Strategy.



VICTORIA UNIVERSITY OF
WELLINGTON
TE HERENGA WAKA



HEADLINE HEAT PUMP NUMBERS

\$70k

ANNUAL RUNNING COST

333k

ANNUAL KWH

32

ANNUAL CO2 TONNES

POTENTIAL OUTCOMES

\$ PER YEAR

CO2

Regular heat pump maintenance based on actual usage saving \$223/heat pump per year (15% efficiency improvement.)

\$ 10,500

4.8

Managing heat pump usage – reduced runtime using schedules and University set temp range saves \$0.355/hr/heat pump.

\$ 20,069

10.62

Early identification of mould conditions and intervention to prevent commercial cleans.

\$ 2-3K

PER ROOM FOR EACH CLEAN

NA

Identification of excess electricity capacity for re-sale or additional use.

\$ 60,000

NA

THE RESULT

The team can now actively monitor the climate, air quality and energy use for each active location, with regular reports allowing them to prioritise problem areas. This allows them to proactively assess each location in a non-intrusive way, and provide preventative maintenance along with improved quality of life for the students.

The Student Accommodation team are planning on deploying the services to a further 33 flats giving visibility of the all 47 of the occupied properties in the portfolio

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