



# Transforming campus space management

With IoT sensors, occupancy analytics and digital twins



"The use of SmartViz technology has been transformational in challenging our preconceptions about space needs. The rich data obtained has not only informed our decisions but has also facilitated meaningful discussions across the university community."

Rachael Langford, President and Vice Chancellor of Cardiff Metropolitan University

# **Background**

Cardiff Metropolitan University, located in Cardiff, Wales, serves around 12,500 students across Cyncoed and Llandaff campuses. Known for its commitment to environmental sustainability, Cardiff Met has earned accolades for its efforts towards net zero carbon emissions.

# Challenge

Manual audits and anecdotal data led to inefficiencies in space usage and decision-making. Many offices were underused, wasting energy and increasing costs. Without real-time insights, managing temperature and air quality was harder, affecting sustainability goals and occupant comfort.

# **Solution**

With increasing demand for teaching and social spaces, the university considered a multi-million-pound construction masterplan. However, new buildings posed financial risks and environmental impacts. The challenge was to find a sustainable solution that met the needs of staff, students, and the planet.







# **Impact**

### **Cost savings**

- Projected £5.1m capital cost saving.
- £102k/year operational costs saving

## **Energy reduction**

- £40k/year cost saving.
- 483 tonnes embodied + 66 tonnes/year CO2 emission reduced.
- 25% energy and water saving potential identified across the campus.

## Wellbeing improvement

- Improved learning environment and wellbeing.
- Identified and improved spaces for better CO2 and temperature.

# Revenue generation

 Integrated insights from student dwell times, retail data and campus amenities to help boost student retention, retail revenue and campus stickiness.



"Working with SmartViz has been a real pleasure. Their approach was not just about providing rich insights but engaging us in interpreting that data to make well- informed decisions about our campus development.

This project has been pivotal in helping us realign our resource utilisation with our core values of sustainability and student-focused education. It proved that effective space management could yield substantial benefits without the need for extensive new buildings."

Rachael Langford, President and Vice Chancellor of Cardiff Metropolitan University

Ready to revolutionise space management for your buildings and campus?