SmartViz
Better Buildings. **Better** Places.

Boosting School Capacity and learning environment

As education is transforming, are your schools evolving with it?

Are you ensuring your spaces are future-ready to handle increasing student numbers and new learning demands?

Schools today face mounting pressure to optimise building usage and cut costs, all while enhancing the student experience. Efficient space and energy management are critical to meeting capacity challenges while fostering better learning environments.

SmartViz helps schools to make the most of their facilities by optimising space, saving energy, and improving overall learning conditions for students.

The challenge with school capacity and environment

Schools struggle with capacity challenges, student wellbeing concerns, and excessive energy costs and CO2 emissions.

According to RIBA, only 5% of schools are operating efficiently. Many classrooms experience CO2 levels that are three times higher than the safe limit (Health & Safety Watchdog). Additionally, UK schools have over £44m in excessive energy costs, as reported by Carbon Trust.

The lack of understanding about how physical spaces are utilised makes effective planning and management impossible, which negatively impact on building performance, including air quality, which can lower student concentration levels, their performance, future career and ultimately the GDP.

Opportunities with smart IoT sensors

Novel IoT sensors can anonymously monitor occupancy of spaces, movements, indoor air quality, energy and asset performance. When combined with timetabling and space planning strategy, they provide an opportunity to make better use of the available capacity, and tackle the space efficiency and building performance challenges.

The sensors are becoming smarter and affordable - they are also easy to install and retrofit in an existing building to deliver simple, effective, low cost, reliable, hassle-free, and scalable solutions.
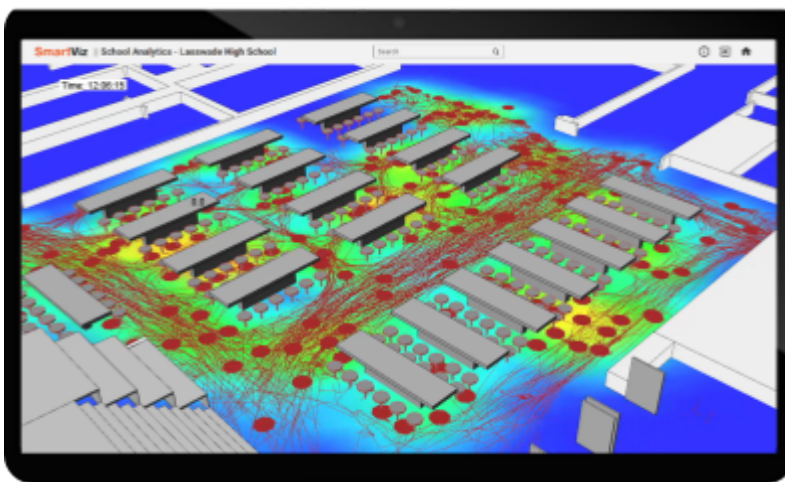
The solution to boost school capacity and environment

SmartViz for Schools is an innovative, first-of-a-kind digital twin application with unique AI based predictive modelling of occupancy and flows to improve the performance and learning environment of school buildings.

SmartViz uses data from multiple sources, including IoT sensors, building management systems, timetabling and attendance records, and applies machine learning and AI to derive insights presented through intuitive, interactive dashboards.

With deep insights on classroom design, ventilation, thermal comfort, and energy use, local authorities and school operators can access practical solutions to meet the growing challenge of capacity, space utilisation, building performance and the learning environment for students. Optimise layouts, improve timetables, and save energy costs.

A solution co-created with schools

SmartViz for Schools has been developed in collaboration with Scottish Futures Trust, Midlothian Council, and several local authorities.

SmartViz provides unprecedented insights into how people use educational buildings and the impact of school design and operations on parameters such as space utilisation, building environment, and energy performance. This helps identify surplus capacities within buildings for growth, inform the refurbishment of existing schools and design of new schools, and enhance pupil wellbeing and learning.

Are You Ready to Boost Your School Capacity and Learning Environment?

See SmartViz in action. Request a demo today and see how SmartViz can benefit you.
Book your demo on smart-viz.com