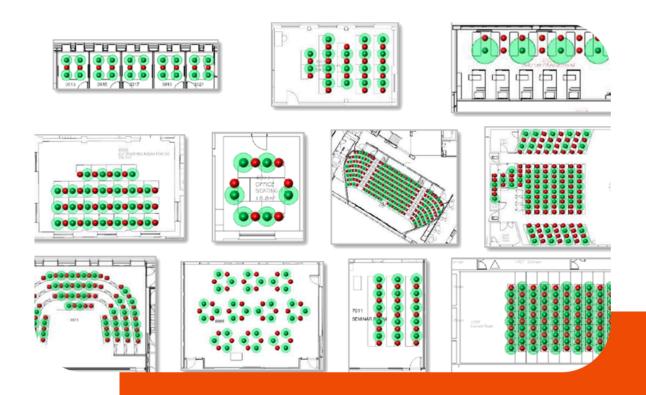






# How SmartViz optimised space utilisation

at the University of Southampton



"SmartViz Campus Analytics helped us manage one of the biggest challenges of the era – enabling us to optimise everything from teaching strategy to timetabling, room booking and cleaning, transportation, and logistics. The visual, interactive scenario planning by SmartViz helped us manage complex, conflicting priorities and reopen the campus successfully."

Kevin Monaghan, Executive Director of Estates and Facilities, University of Southampton

## Be structured

The COVID-19 pandemic posed unprecedented challenges to universities, disrupting traditional ways of teaching, learning, and research.

Southampton University was one of the seven major UK and Irish universities that used SmartViz to support reopening for over 200,000 students during Covid and beyond.

# Challenge

#### Lack of data and insights:

The university did not have access to detailed data and insights on how their buildings were being used, which made it difficult to quickly prepare for the new ways of hybrid teaching, implementation of social distancing, and ensuring student safety.

#### Efficiency of space use:

Given the challenges, teaching and social spaces needed to operate at lower capacities. Over 350 spaces for 13,200 seats were reduced to 15% utilisation for social distancing. The opportunity to optimize and boost efficiency was crucial to deliver quality education and student experience.

### Solution

#### Data integration and single source of truth:

SmartViz integrated data from diverse systems such as CAFM systems, timetable, and BIM models to create a single source of truth across the university estate.

#### Digital twin implementation:

SmartViz was used to integrate and present the data as a digital twin, providing visual insights into building performance and space management. This provided a platform that harnessed the power of data to deliver insights and support evidence-based decision making on the performance of estate, buildings, assets, people, and systems across space, time and different levels of granularity.

## Predictive modelling and optioneering:

SmartViz's intuitive, interactive, and real-time interface allowed for rapid interrogation of the insights and predictive modelling and optioneering to optimize everything from classroom occupancy, timetabling, transport, movements, signage, waiting, queuing, and space booking. The predictive modelling and what-if scenario planning feature was used to optimize decisions across diverse disciplines within a workshop environment.

#### Decision making and estate optimization:

The SmartViz platform brought diverse groups of stakeholders together, from estates, operations, facilities management, timetabling, transport, security, health & safety, student accommodation, and student welfare teams. The predictive modeling and what-if scenario planning feature was used to optimize decisions across diverse disciplines within a workshop environment.



# **Impact**

The implementation of SmartViz's solution resulted in several key improvements for the University of Southampton, including:

#### Safe return to campus:

The real-time interactive model helped the university optimize capacities, circulation, timetables, space booking, and signage to enable a safe return of over 22,000 students and staff.

#### Maximum contact hours and improved student experience:

The real-time interactive model helped the university optimize capacities, timetables, booking, signage to maximize student contact hours as well as health and wellbeing.

# Stakeholder engagement:

The SmartViz platform brought diverse groups of stakeholders together, from estates, operations, facilities management, timetabling, transport, security, health & safety, student accommodation, and student welfare teams.

"In the post-Covid world this pioneering platform should pave the way for all universities to optimise their estates and tackle the serious challenges with performance in terms of space, energy and people."

Kevin Monaghan, Executive Director of Estates and Facilities, University of Southampton