Presenter Introduction:
Matthew was named the Royal Academy of Engineering’s Young Engineer of the Year 2022 and the Institution of Mechanical Engineers Young Visionary 2016 for his contributions to the global Smart Building industry. He now sits on the Institution’s Strategy Committee. As a recognised thought leader, Marson is a keynote speaker at international industry events related to emerging technology, net-zero design and places at the building and city scales.

Presentation Summary:
This presentation demonstrates, through a chronology of examples, the development of smart buildings in the 2010-20s. As the financial cost and complexity of sensors and cloud computing reduced, smart buildings became increasingly prevalent. Initially, sustainability was the primary focus with the use of HVAC analytics and advanced metering in the early 2010s. The middle of the decade saw an economic transformation of the commercial office sector and the driver for creating a smart building was concerned with delivering flexible yet quantifiably used space. Driven by society’s emphasis on health, wellbeing and productivity, smart buildings pivoted their focus towards the end of the 2020s. This research has evidenced that smart buildings use data to improve performance in sustainability, in space usage or for human-centric outcomes.

Organizers:
School of Civil, Environmental and Geomatic Engineering, UCL
The Bartlett School of Sustainable Construction, UCL
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