

# SMART Technology - Extreme Sustainability

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## ABSTRACT

The Internet of Things (IoT) and SMART technologies are changing the way we work and live at an incredible rate. We are designing and developing buildings today that are meant to have a 50-100 year design life. With accelerating change effect of technology, how can the industry meet the challenge to create tall building solutions that will stay viable and relevant over the life of the asset.

Technology is also disrupting the traditional design and build delivery approach for the construction industry. New building will incorporate thousands of SMART sensors feed data to the integrated Building Management Systems (BMS) to allow the building to adapt and optimize for improved energy efficiency, safety and security. As the building systems become more complex the focus and emphasis is shifting from the initial design and construction phase to the operation and ongoing demand for continual system refresh. This shift will further commoditize certain sectors of the industry while creates the potential for exciting new business models.

This paper will explore the concept of buildings as infrastructure platform. How the industry can respond to the challenge and opportunity of SMART technology and create adaptive systems that can evolve to the changing needs of the users and drive new levels of Sustainability.

## BIOGRAPHY

Shonn Mills is a champion of design and innovation with over 25 years of experience in the design and management of large building and transport infrastructure projects. Shonn's philosophy is that engineering leadership should be focussed on the quality of the product. He is recognised for his comprehensive cross-discipline knowledge in Tall Buildings and besides management of the department actively provides technical leadership and oversight for key projects in the portfolio. He is actively involved in the Council for Tall Buildings and Urban Habitat and serves as Deputy Chairman for the CTBUH Scandinavia chapter.