Special Issue

Digital Twin in the Construction Industry—Advances and Challenges

Message from the Guest Editors

Digital Twins (DT) technology, an integral part of the 4th industrial revolution, has paramount significance for the Architectural, Engineering and Construction Industry (AECI) due to its potential for assisting in the whole life-cycle of constructed assets. The purpose of this SI is to present the progress achieved so far and the challenges of the integration of DT technology into AECI in the fast approaching smart asset era.

It is, therefore, our great pleasure to invite you to contribute to this Special Issue by presenting your results on Digital Twin Technologies for AECI from an academic, design office's or construction company's point of view. The papers can focus on the adoption of Digital Twin Technologies related to all aspect of AECI including barriers and enablers, sustainability, agility, resilience, organisational requirements, implementation challenges and the multi-dimensional technological prerequisites.

For further reading, please follow the link to the Special Issue Website at:
https://www.mdpi.com/journal/buildings/special_issues/7THW2SE4NH

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

Editor-in-Chief

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