Special Issue

Building Information Management (BIM) toward Construction 5.0

Message from the Guest Editors

The Industry 5.0 will widen the vision of Construction 4.0, but still focus on a transition facilitated by advanced digital technologies. Building information modeling (BIM) is a mature area that has helped provide conceptual information models for the built environment. Today, it is vital to also incorporate new technologies, e.g., the Internet of Things (IoT), product data templates, digital twins (DTs), and advanced AI techniques (such as graph neural networks (GNNs) and machine learning (ML)). This development has, in turn, increased the need for more advanced frameworks and reference models that show how advanced digital technologies can be combined. This Special Issue aims to cover the latest research findings and ideas on the topic of digital and intelligent approaches for Construction 4.0 and that can help us move toward Construction 5.0. For further reading, please follow the link to the Special Issue Website at: https://www.mdpi.com/journal/buildings/special_issues / VH4MTB4M9K

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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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