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BIM-Based Construction Management: Trends and Prospects

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Deadline for manuscript submissions: closed (30 June 2024)



mdpi.com/si/169212

Message from the Guest Editors

The implementation of Building Information Modelling (BIM) is continuously on the rise, giving the construction industry the opportunity of having more sustainable, environmentally friendly activities, quicker construction time, and better safety and cost management. Current trending technologies such as Artificial Intelligence (AI), Digital Twin, Cloud Technology, Automation, and Building Energy Modelling (BEM) are reshaping the practice of BIM and are imposing a greater perception of sustainability on the building industry.

This Special Issue seeks to present the benefits and challenges that the building industry is facing when adopting these technologies, with a special focus on sustainability as a cornerstone in the overall construction process. For this Special Issue, we welcome papers dealing with case studies, literature reviews, survey findings, analytical methods, and tools.

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1LWF18R62G

Specialsue





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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.

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