

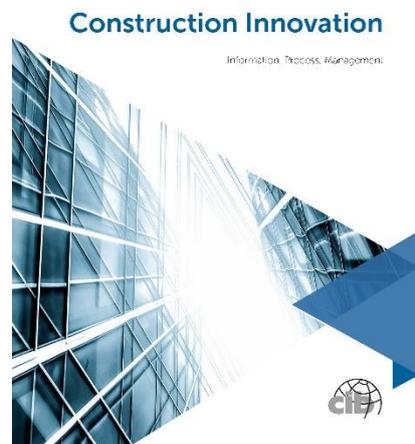


**April 2019**

**CIB Call for Papers Special Issue Encouraged Journal  
Construction Innovation:  
Information, Process, Management**



ISSN 1473-1175  
Volume 00 Number 00 2018



**Special Issue on  
Industry 4.0: Disrupting the construction and civil engineering supply chain**

We are pleased to announce our Special Issue call for papers for the CIB Encouraged International Journal of Construction Innovation, Information, Process, Management with the theme: Industry 4.0: Disrupting the construction and civil engineering supply chain.

The term Industry 4.0 is synonymous with the concept of integrating cyber-physical systems, the Internet of Things (IoT), artificial intelligence and computerisation of manufacturing operations throughout the supply chain. Many advanced manufacturing companies have embraced this technological revolution and have resolved themselves to collecting, transferring, and analysing voluminous 'big data' to secure organisational agility, for example by rapidly adapting and responding to changes in customers' demands and delivering high-quality services and products. In response to these innovative industry practices, leading academic journals in the fields of robotics, electronics, computer science and production engineering have increasingly devoted significant attention to publishing the latest developments and findings on Industry 4.0 applications.

However, the application of these contemporary concepts and methods within the construction industry has hitherto received scant academic attention.

This pioneering special issue of Construction Innovation is the first to provide a global manifesto specifically devoted to attracting the disparate efforts of the world's leading researchers within the construction engineering and management discipline on Industry 4.0. Concomitant objectives are to: provide an international platform to showcase emergent findings and contribute to generating new knowledge in this field of science; explore emerging manufacturing technologies associated with Industry 4.0 and determine how such could be transferred into construction activities; provide case studies of Industry 4.0 adoption and implementation within the construction sector; and report upon how Industry 4.0 disrupts and transforms current construction operations and its probable impact upon supply chain partners.



This special issue welcomes various submission types, such as original research contributions, case studies, comparative studies, conceptual papers and review studies. Industry 4.0 (and associated) topics of interest within the construction and civil engineering supply chain management include, but are not limited to:

- Implementation and applications
- Challenges, vision, and concepts associated with adopting and implementation
- Resource flow management and decision making
- Real-world case studies
- Enhancing supply chain transparency and sustainability performance with IoT and cloud services.
- New digital construction supply chain models
- Managing data interoperability and governance for operations on construction sites
- Managing the environmental impacts of construction activities
- Standards, models and reference architectures and platforms for operating and managing the supply chain
- Future business models of the construction industry
- Internet of Things (IoT) applications
- Assessing the readiness and maturity state of construction organisations
- Data as a resource for digitalising supply chains
- Coalescence of digital technologies
- Sensor based technologies
- Cyber security and cyber-crime deterrence
- Integrating cyber-physical systems
- Autonomous systems and automated methodologies
- Integrating BIM and data-driven techniques

## How To Submit

The closing date for submissions is: **December 2019**

Please submit your papers direct via the journal's [ScholarOne](#) website . Please indicate on the submission menu that your paper is for the "Industry 4.0: Disrupting the construction and civil engineering supply chain" special issue.

Full author guidelines and instructions on how to submit can be found [here](#) .

For any queries, please contact the lead Guest Editor.

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