

Exploring the Potentials of Smart and Sustainable Project Controls within the Construction Industry: Drivers and Challenges



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Research Abstract

This research examines the boundaries of project controls throughout the project life-cycle on construction projects. The researcher evaluates factors contributing to the success and failures of projects, as well as identifies what project control mechanisms are currently being used in the construction industry to control projects. Details of the study reveal that although efforts have been made to control projects in various aspects of the construction project life-cycle, these do not effectively address project controls. Thus, this research proposes the development of a smart and sustainable project controls framework model that would facilitate effective control of activities identified throughout the project life-cycle.

Supervisors

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Publications

- Baban, H.S., Seneviratne, K., Nielsen, Y. (2020). Exploring the Potentials of Smart and Sustainable Project Controls within the Construction Industry: Drivers and Challenges. *Journal of Strategic Innovation and Sustainability*, accepted.
- Baban, H.S., Seneviratne, K., Nielsen, Y. Exploring the Potentials of Project Controls within the Construction Industry: Drivers and Challenges. *Proceedings of the International Conference on Industrial Engineering and Operations Management Dubai, UAE, March 10-12, 2020.*
<http://www.ieomsociety.org/ieom2020/papers/247.pdf>
- Abuelmaatti, A., Ahmed, V., & Baban, H.S. (2014). Collaborative Environments in Small and Medium-sized Enterprises in Architecture, Engineering and Construction. *Journal of Information Technology in Construction*, 183-193.