

# A Research Study to Develop a Framework for Collaborative Project Delivery in Ireland's Architecture, Engineering and Construction (Aec) Sector Through Sustainable Practices

Emmanuella A. Twumasi, BSc. and Lloyd M. Scott, PhD.  
Dublin Institute of Technology  
Dublin, Ireland

The Irish Construction industry is shown to lack behind in relation to other industries. The industry is faced with a lot of challenges and not the least of which is the need for collaboration among stakeholders. The relationship that exist among stakeholders is one of adversity where collaboration/knowledge sharing is avoided. This is seen to be a major setback of the industry's growth (McAuley et al., 2015). In the world today where competition is ever increasing, construction firms should begin to see collaboration as a tool for achieving greater organizational goals and effectiveness. A collaborative engagement in the delivery of projects is key to the growth of any construction industry (McAuley et al., 2015; Adetola et al., 2011) Irrespective of the benefits a collaborative approach presents in the delivery of construction projects, its adoption in the Irish Architecture, Engineering and Construction (AEC) sector is still at its infancy stage. Ireland needs a strong and sustainable construction sector, one that is based on best construction practices. The problem relates lack of collaboration in AEC projects with sustainable practices. The aim of this study therefore is to develop a framework for collaborative project delivery in Ireland's AEC sector through Sustainable Practices.

This poster is part of an ongoing research towards a PhD at Dublin Institute of Technology. The study will identify key collaborative project delivery approaches in Ireland's AEC sector, establish a nexus between sustainable practices and collaborative project delivery of value for money projects in Ireland; and develop a framework to facilitate collaborative project delivery through sustainable practices. The early explorative phase of the research involves getting a depth of understanding as to where the AEC sector in Ireland is relative to collaborative project delivery. This would be subsequently followed by structured survey which will add a depth of findings from this quantitative approach. The study adopts the use of Delphi technique to collect data from expert project professionals who are involved in key projects such as DIT Grangeegorman campus, the National Children's Hospital and similar projects in Ireland.

Following the early phase exploratory work, the analysis shows that issues facing the advancement of collaborative projects include the position of stakeholders in addressing the environmental legislative requirements. Brexit, skilled labor shortages, the lack of a coherent strategic focus on change management in the AEC sector, and the slow progress in implementing sustainable policies are key challenges facing suppliers to the construction sector. Project delivery is hampering sustainable practices because of lack of coordination, skilled workforce and legislation. The next phase of the research will explore in detail the issues identified in the exploratory phase of this research. The study will present a novel contribution to knowledge particularly on the subject matter of collaborative project delivery through sustainable practices. It is envisaged that this will impact the Irish construction industry by ensuring a greater level of collaboration among the Irish construction firms. The framework that will result from this study will facilitate collaborative project delivery through sustainable practices in the Irish construction industry. This study will as well ensure greater efficiency in the successful completion of construction projects and create a conducive business environment to attract high levels of foreign investment.

**Keywords:** Collaborative Project Delivery, Ireland's AEC sector, Sustainable Practices

## References

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