

APPLYING AGILE DESIGN METHODOLOGIES FOR DESIGN COMPETITIONS; experience on the INWMG Footbridge Competition

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**Summary** Developing a highly creative and complex design response in a short time frame requires inspired work from many contributors from concept to submission. Agile design methodologies are uniquely suited for design completions, employing a very collaborative, iterative design process where the design is continuously developed to foster design innovation through collaborating with the team's diverse group of technical experts with the common purpose of finding the best design solutions. Agile design processes have been highly developed for software design and many agile methodologies are applicable for the built environment. The values and principles of agile design are being increasingly appropriated to developing building architecture and can be adopted by bridge designers alike.

This session explores how design thinking complimented with agile design processes was conducted for the INWMG Footbridge Competition

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## 1. Introduction

Design competitions present a formidable challenge to develop a resolved design concept that is an exceptionally responsive to the competition program, site context, and user experience, all in a very short amount of time. This paper explores how applying agile design processes can be exceptional useful in addressing these challenges using the INWMG Footbridge Competition as a case study.

Agile design processes have been highly developed for software design and many agile methodologies are applicable for the built environment. Agile design methods streamline design processes to identify and prioritize demands and then assign resources. The values and principles of agile software design are being increasingly appropriated to building architecture and can be equally adopted for pedestrian bridges and urban design projects. Agile design methodologies are uniquely suited for design competitions, employing a very collaborative, iterative design process where the design is continuously evolved. This fosters design innovation through explicitly forming design principles at the onset, evolving the design experimentally and iteratively, not advancing work without engaging stakeholders, implementing a collaboration environment for the team incorporating structured feedback loops for fostering continuous improvement, with the common purpose of finding the best design solution.

## 2. Case Study: The INWMG Footbridge Competition

The Royal Institute of the Architects of Ireland (RIAI) initiated an international design competition in early 2019 for a new footbridge linking the Irish National War Memorial Gardens over the river Liffey connecting with the existing cycling paths in the heart of Dublin.

The commissioners wanted a bridge design and landscape setting that rises above the pure utility, beyond basic construction, to combine all that is practical and necessary, with a design proposal this is meaningful and

