

**Supervisors**

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**Project title**

Vision Digital Built Britain – Exploring the readiness of construction practitioners to embrace the values of Digital Twins (DT).

**Project description**

Enough evidence exists to suggest that the future of the Built Environment (BE) is digital and data-centric. The digitalisation of construction processes can provide opportunities to improve the performance of infrastructure and assets within the BE, as well as facilitating the sustainability and net zero-carbon goals (Broo et al. 2021). Consequently, the UK government has shown unwavering commitment and is currently taking steps toward achieving its vision of providing digitally enabled built environment infrastructure through the integration of Artificial Intelligence (AI), Augmented Reality (AR), Internet of Things (IoT) and cloud computing (Broo et al. 2021, Opoku et al. 2021). As part of the Digital Built Britain (DBB) agenda, digital twins (DTs) are at the forefront of enabling the digitalisation of the BE. A DT which provides a digital representation of the physical asset, is viewed as one of the key outputs of any construction project in the future. Such an approach would redefine accountability, traceability, and precision. Undoubtedly, this will require training provisions and skills development to achieve the digitally enabled workforce needed to deliver future projects. However, the discussions on the development and deployment of DTs in the BE often too easily assume the elements of a digital future in isolation from the views and perceptions of practitioners, who are at the heart of the delivery process. Meanwhile, evidence from other sectors like manufacturing has shown the importance of people-centred digitalisation given that the human factor is one of the key critical barriers to successful technology deployment. This study thus aims to investigate practitioners' views on the value of DT and assess their readiness to deliver projects that comprise DT. This study will contribute to the digitalisation agenda in the construction sector and play a pivotal role in encouraging people-centred digitalisation of the industry by providing insight into practitioners' views to avoid resistance and lack of interest.