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The Propriety and Limitations of Relying on Artificial Intelligence and Digitalization in the Field of Quantity Surveying, Sri Lanka

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Abstract

This specific study is carried out to determine to which extends the Artificial Intelligence (AI) can intervene within the field of Quantity Surveying and the tasks accommodated with the field within the Sri Lankan context. The Objective of this research is to identify the tasks and duties that a conventional Quantity Surveyor may perform which are the most critical and vulnerable towards being AI based in the future. These identified tasks and duties will be then directed towards a population of Quantity Surveyors and related professionals to gain their understanding on this matter in both qualitative and quantitative manners. The interviews were put through content analysis process and the gathered Quantitative data were analysed through Likert scale. The questionnaires were incorporated with Relevance Important Index analysis. The conclusions further denoted that most of the Quantity Surveying related tasks and duties were compatible to be associated with AI and digitalized means which could lessen the actual Quantity Surveying personnel involvement in the future. The most conventional and essential Quantity Surveying practices were at the most risk of being replaced by AI systems such as Estimating practices, Cash-flow, labour and material management to name a few. The analysis also proved to show which are the most vulnerable Quantity Surveying duties they could be. Given the proprietary of these each duty to be incorporated with AI or not, the limits they could be associated with, and the reasons why are lastly presented as in recommendations and implications which denoted that it is more probable for Quantity Surveyors to incorporate the AI systems rather than having to face the risk of being replaced by the systems themselves.

Keywords: *AI, Limitations, Digitalization, Propriety, Quantity Surveyor*