



Navigating the Path to Construction 4.0: Policies, Challenges, and Strategies in Malaysian Construction Industry



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ABSTRACT

Objective – This research introduces the Kaleidoscope Model, which offers a roadmap for policymakers to perform effective changes with the moderating effect of the challenges faced.

Methodology – The study employs document analysis and semi-structured interviews for qualitative data through content analysis.

Findings – Results highlight that Policy Adoption and Policy Implementation notably influence the evaluation of the effectiveness of the Construction 4.0 policy. It is found that the moderating effect (challenges) does not influence the adoption of the Construction 4.0 policy in the Malaysian construction industry.

Novelty – The novelty of this research lies in its provision of a framework, namely the Kaleidoscope Model, designed to facilitate the assessment of the effectiveness of implementing the Construction 4.0 policy in Malaysia. This framework aids policymakers and construction stakeholders in better understanding how to embrace new technologies, ultimately contributing to the realization of policy goals and enhancing effectiveness and efficiency in the construction industry.

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1. Introduction

Advanced technologies are at the forefront of Industry 4.0, revolutionizing industries and driving economic growth.

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