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Exploring of Critical Success Factors for Modular Construction in Housing Projects in Saudi Arabia

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Abstract

This study investigates the critical success factors (CSFs) influencing modular construction in housing projects within Saudi Arabia, a method gaining traction as a sustainable and efficient alternative to traditional building practices. By integrating quantitative and qualitative research methods, including surveys and expert interviews, the research identifies and evaluates the significance of various CSFs in the modular construction landscape. The analysis highlights the hierarchical importance and interdependencies among these factors in Saudi Arabia's unique construction environment. Key factors such as planning and design, effective project management, skilled labor, efficient logistics, and regulatory compliance emerge as pivotal to the success of modular housing projects. The study's findings aim to guide policymakers, investors, and industry practitioners towards optimizing strategies for modular construction, thus contributing to Saudi Arabia's housing sector development in alignment with Vision 2030 goals. The insights could also serve as a foundational framework for future research and practical applications in modular construction, emphasizing its role in enhancing sustainable and affordable housing solutions in the region.

Keywords

Modular Construction, Modular Housing, Critical Success Factors, Planning, Manufacture.