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Summary
In this research, the efficiency of off-site construction method in high
rise buildings will be evaluated in terms of advantages and
disadvantages, paying special attention to methodologies. There are
lots of techniques to build and many of them have not satisfactory
results for construction companies which deal with high rise buildings.
One of the best options in a high-rise is to manufacture structural
components off-site. The use of BIM obviously makes this process
more efficient.
The main purpose of this research is to explore the use of off-site
construction in case of high-rise buildings and how this speed up the
schedule in terms of productivity, certainty in delivery, skills improving,
reliability, and data transparency. A wide literature review will be
conducted in order to identify major factors affecting off-site
construction to reduce time and cost as well as safety.
The research method will be based on a multiple case study. The
study will be centered on data collection, mainly from construction
companies, and research on the implementation of new practices.
The Conclusions of this study aim to help in the construction industry
practitioners, such as decision-makers, policymakers, clients,
developers, architects, engineers, contractors, and modular
manufacturers, to have a better understanding of the suitability of
composite structural construction and devise appropriate strategies to
overcome the identified challenges.