

An evidence-based analysis for occupational health and safety management throughout the lifecycle of megaprojects

Summary

Despite of the remarkable improvement in terms of occupational health and safety in the construction sector through the implementation of a variety of regulations across the world, occupational health and safety issues on construction sites and throughout the project whole life cycle are still significant in terms of a consistent high number of work-related illnesses and injuries as compared to other economic sectors.

Interest is growing on how to support the designer to take care of occupational health and safety from the early design stages using a whole lifecycle thinking approach. By presenting a new Evidence-based Health and Safety Analysis (EHSA) approach for designers (architects and engineers), this research seeks to reducing work-related injuries and illnesses on site and throughout the building project lifecycle. The research into EHSA is intended to evaluate an innovative way to facilitate evidence-based learning in building design with the collection and use of data and information accumulated from professional knowledge about fatalities and accidents along with best practices and innovations in the field of occupational health and safety management that have proven to be effective for the construction industry.

The inherent risks associated with the construction of megaprojects have continually remained the centre of attention over the years, based on the fact that megaprojects have capably higher risks associated with injury and mortality in comparison to other industries. Megaprojects owners, designers, construction companies and local authorities must continually work toward enhanced occupational health and safety management. The proposed EHSA process can lead to effective collaboration and communication amongst the various stakeholders and potentially lead to reduced risks in relation to injuries and even mortality rates, while assuring that the megaprojects are completed within the given timeframe.

Keywords

Construction, health and safety management, megaprojects, evidence-based learning, analysis.



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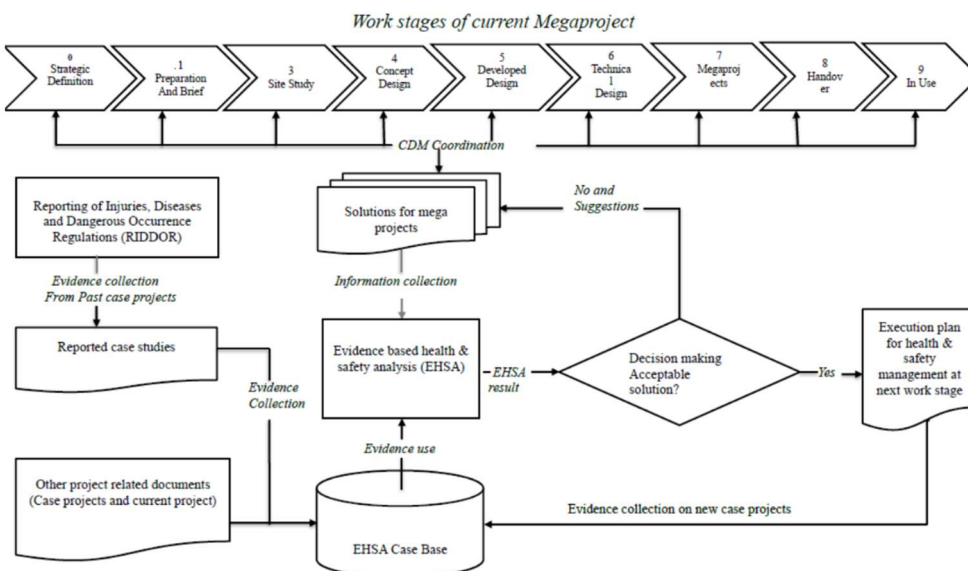
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