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Risk Management in Construction Projects

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Abstract : Companies and professionals in the construction sector face various risks in every project depending on the characteristics, size, complexity, the location of the projects and the techniques used. Some risks' effects may increase as the project progresses whereas new risks may emerge. Because of the ever-changing nature of the risks, risk management is a cyclical process that needs to be repeated throughout the project. Since the risks threaten the success of the project, risk management is an important part of the entire project management process. The aims of this study are to emphasize the importance of risk management in construction projects, summarize the risk identification process, and introduce a number of methods for preventing risks such as alternative design, checklists, prototyping and test-analysis-correction technique etc. Following the literature review conducted to list the techniques for preventing risks, case studies has been performed to compare and evaluate the success of the techniques in a number of completed projects with the same typology, performed domestic and international. Findings of the study suggest that controlling and minimizing the level of the risks in construction projects, taking optimal precautions for different risks, and mitigating or eliminating the effects of risks are important in order to prevent additional costs for the project. Additionally, focusing on the risks that have highest impact is the most rational way to minimize the effects of the risks on projects.

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