Dynamic and multi-dimensional risk management of construction projects

Managing risks in construction projects has been recognized as a very important management process to achieve the project objectives in terms of time, cost, quality, safety and environmental sustainability. However, thus far most research has focused on some aspects of construction risk management rather than using a systematic and holistic approach to identify risks and analyze the likelihood of occurrence and impacts of the risks. This study aims to identify and analyze the risks associated with the development of construction projects from project stakeholder and life cycle perspectives. This research also found that risks spread through the whole project life cycle and many risks occur at more than one phase, with the construction stage as the riskiest phase, followed by the feasibility stage. This research would conclude that clients, designers and government bodies must work cooperatively from the feasibility phase onwards to address potential risks in time, contractors and subcontractors with robust construction and management knowledge must be employed early to make sound preparation for carrying out safe, efficient and quality construction activities. A building project is a process where each activity and phase includes different risks that should be handled by the project participants. Nowadays, the building market is developing very fast and it is important to deliver the project to the client on time and within the budget, each decision made in the conceptual design phase can have an impact on other phases and bring consequences that could be negative for the building project, assignments in a building project, such as conceptual, preliminary, design development and construction execution has performed by a project participants according to the role, can also be referred to a project or a project task, because it contains the parts that the project teams work on within a company. The risks related to critical events in the project tasks are managed by the project participants according to their responsibilities defined in the contract form. The risks managed in the project tasks are an integral part of the risk existing in the building projects to complete on time and within the budget.

Biography

M Manikandan is the Senior Structural Engineer-1 at Gulf Consult, Kuwait. He is in the construction industry since past 15 years and has completed many landmark projects in Kuwait as well in Saudi. He has received his PhD in Risk Management in International Construction Projects as an external part time Researcher with VELS University Chennai, India and his received Civil Engineering degree from Kamraj University Madurai, India in 2000 followed by MBA in Project Management from Sikkim Manipal University, India. His professional interests focus on construction/project management, structural management and risk management in the construction projects. He has published 50 papers in international and national journals and given many keynote speeches in the international conferences.

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