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# **RISK MANAGEMENT IN CONSTRUCTION PROJECTS IN SRI LANKA**

**Thesis**

**By**

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## **Abstract**

Sri Lanka is a developing country and there are several major construction projects undertaken annually and it has been increased dramatically due to the Tsunami disaster. Construction is a highly risk-prone industry without a very good track record of coping with risks. The stakeholders, as a result, have been enduring the agonizing outcomes of failure in the form of unusual delays in project completion, with cost surpassing the budgeted cost and sometimes failing to meet quality standards and operational requirements. Considering the comparatively high level of uncertainty due to political and economical conditions in Sri Lanka, it is even more important to conduct research work on the area of project risk management in construction.

This paper, via questionnaire survey and interviews, evaluates the current practices of project management and risk analysis and management adopted by the general contractors in Sri Lanka and presents a list of risk factors ranked by the project managers in the industry. The results reveal that overall the construction industry in Sri Lanka lacks systematic risk management due to the subjective nature of risk management coupled with lack of knowledge of such techniques. However, there is a positive attitude towards risk management concept.

Schedule management techniques were implemented least comparing to all other project management techniques and it involved a high risk for which using Monte

Carlo simulation in estimation of the total duration was recommended. Cost underestimation was ranked by the responders as the most important risk factor with highest potential loss where design related risk factors had the highest probability compared to other risk factors.

Further studies were recommended on budget risk and how it evolves and also on roots and possible solution for design changes.

