

An Overview of Various Techniques and Approaches of Concurrent Delay Analysis in the Sri Lankan Construction Industry

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Concurrent delay is a very complex and controversial topic in the construction industry. Analysis of the concurrent delays became challenging due to the absence of clear provisions in the standard form of contracts. Meanwhile, project parties try to pass the contractual liability to the other parties and make the situation more problematic. The lack of knowledge on the concurrent delay analysis procedure among project parties would be another reason to increase the complications. Even though various delay analysis techniques and approaches are available in the construction industry, all of them cannot be used to assess any concurrent delay situation. Hence this study aims to investigate the adaptability of various techniques and approaches for concurrent delay analysis in the Sri Lankan construction industry. The research was conducted based on expert interviews by adopting a qualitative research approach. The collected data was analysed via content analysis using NVivo software. Research findings revealed that the lack of proper record-keeping, the ambiguity of concurrent delays, and the lack of advanced scheduling software as the main challenges of concurrent delay analysis in the Sri Lankan construction industry. Further, the time impact analysis method and window analysis method are the most recommended Critical Path Methods (CPMs) for concurrent delay analysis in the Sri Lankan context. However, in some cases, one CPM is not adequate to analyse the entire delay of a project and research findings recommended to use a combination of CPMs in such situations. Ultimately, the study concluded that the selection of concurrent delay analysis techniques depended on the type of construction schedule of the project and available project records.

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