

**ESTIMATING PROBABILITY OF PROJECT COMPLETION:  
PARKINSON'S LAW vs. THEORY OF CONSTRAINTS**

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**ABSTRACT**

Given the probabilistic durations of tasks together with the associated variance for each task duration, it's fairly straight forward process to estimate the project completion times with the desired confidence percentage levels. However, Parkinson's Law suggests that, in typical organizations, "Work expands so as to fill the time available for its completion," which eliminates the benefit of any slack time available in the tasks of the project and thereby resulting in all paths becoming critical paths. Theory of Constraints' (TOC) Critical Chain Project Management (CCPM) advocates removing individual task buffers and moving them all to the end of the project buffer to avoid wasting slack time, promote completing individual tasks on time, as well as to protect the client's interest by meeting the scheduled completion due date. This study aims to understanding how these two concepts combined might affect the project completion. Contrived numerical examples are attempted to discover possible insights as to what needs to happen for the organization executing the project to benefit from the CCPM in not only countering the Parkinson's law but in promoting an organization culture that continues to yield dividends time after time for many projects to follow.

**KEYWORDS:**Project Management, Parkinson's Law, Theory of Constraints, Critical Chain Project Management, Project Dynamics

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