

New Modeling Framework for Project Risk Analysis with Uncertain Durations and Stochastic Risks

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This paper presents a modeling framework for risk analysis and risk leveling and mitigation in project planning and scheduling. The proposed methodology illustrates how a project risk profile could be constructed utilizing a dynamic Poisson compound process for the project risks. The model underlying considerations are presented and the model is illustrated and analyzed. Finally, examples are given of how the model is used for scheduling decisions in projects.