

Construction Project Planning Using Fuzzy Critical Path Approach

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Abstract : Planning is one of the most important phases of the management science and network planning, which represents the project activities relationship. Critical path is one of the project management techniques used to plan and control the execution of a project activities. The objective of this paper is to implement a fuzzy logic approach to arrange network planning on construction projects. This method is used to finding out critical path in the fuzzy construction project network. The trapezoidal fuzzy numbers are used to represent the activity construction project times. A numerical example that represents a house construction project is introduced. The critical path method is implemented on the fuzzy construction network activities, and the results showed that this method significantly affects the completion time of the construction projects.

Keywords : construction project, critical path, fuzzy network project, planning

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