

Overview of Time, Resource and Cost Planning Techniques in Construction Management Research

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Abstract : One way to approach construction scheduling optimization problem is to focus on the individual aspects of planning, which can be broadly classified as time scheduling, crew and resource management, and cost control. During the last four decades, construction planning has seen a lot of research, but to date, no paper had attempted to summarize the literature available under important heads. This paper addresses each of aspects separately, and presents the findings of an in-depth literature of the various planning techniques. For techniques dealing with time scheduling, the authors have adopted a rough chronological documentation. For crew and resource management, classification has been done on the basis of the different steps involved in the resource planning process. For cost control, techniques dealing with both estimation of costs and the subsequent optimization of costs have been dealt with separately.

Keywords : construction planning techniques, time scheduling, resource planning, cost control

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