Human Resource Allocation in Project Management

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Abstract

This research proposed to aim to improve the efficiency of roles assignment and maximize the performance, which may provide an approach to the project roles assignment problem from a different perspective. The framework assists companies to make decisions for project roles assignment with constraint labor cost, capabilities, and project duration, which is relevant to profits to a software company, in further, a consideration of staffing policy definition and adjustment is also proposed. Practical significance of this approach will be illustrated through a series of computational experiments. In this study, the performance of labor is quantified separately according to individual roles in the different phases in software development process model, the development cost regarded as hiring cost, communication cost between different workers in the same phases, and the relocation cost of labor might occur while transferring workers from the role into another. To concentrate on optimization for project roles assignment, the plan-driven process, waterfall model and incremental model, is adopted as the evaluation criteria, the project duration extension and person types are not within the scope of this study.

Key Words: Project management, human resource allocation
References


