

A study on how to improve PMBOK guidelines performance by simulation - Case Study: National Gas Company of Lorestan province

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Abstract—The project-oriented organizations are more appropriate for sustainable environments. Any effective project-oriented organization should institutionalize its project management processes in such a manner to yield the greatest possible profits. The aim of this paper is to study the relationship between the project management PMBOK guideline (Project Management Body of Knowledge) and simulation technology in project-oriented organizations. The methodology involves using five steps for applying these two tools aimed at enhancing project management processes in the Lorestan Gas Corporation, as one of the project-oriented organization. Results show the implementation of such management approach leads to a 5% performance improvement and using PMBOK can be instrumental in effective delay management. The implementation of the aforementioned improvement package was effective in improving the efficiency of organizational processes; in terms of optimizing the resource utilization that has manifested itself in resource losses and cost reductions.

Keywords—Project-orientation, processes, PMBOK, optimization.