

Five Years Analysis and Mitigation Plans on Adjustment Orders Impacts on Projects in Kuwait's Oil and Gas Sector

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Abstract : Projects, the unique and temporary process of achieving a set of requirements have always been challenging; Planning the schedule and budget, managing the resources and risks are mostly driven by a similar past experience or the technical consultations of experts in the matter. With that complexity of Projects in Scope, Time, and execution environment, Adjustment Orders are tools to reflect changes to the original project parameters after Contract signature. Adjustment Orders are the official/legal amendments to the terms and conditions of a live Contract. Reasons for issuing Adjustment Orders arise from changes in Contract scope, technical requirement and specification resulting in scope addition, deletion, or alteration. It can be as well a combination of most of these parameters resulting in an increase or decrease in time and/or cost. Most business leaders (handling projects in the interest of the owner) refrain from using Adjustment Orders considering their main objectives of staying within budget and on schedule. Success in managing the changes results in uninterrupted execution and agreed project costs as well as schedule. Nevertheless, this is not always practically achievable. In this paper, a detailed study through utilizing Industrial Engineering & Systems Management tools such as Six Sigma, Data Analysis, and Quality Control were implemented on the organization's five years records of the issued Adjustment Orders in order to investigate their prevalence, and time and cost impact. The analysis outcome revealed and helped to identify and categorize the predominant causations with the highest impacts, which were considered most in recommending the corrective measures to reach the objective of minimizing the Adjustment Orders impacts. Data analysis demonstrated no specific trend in the AO frequency in past five years; however, time impact is more than the cost impact. Although Adjustment Orders might never be avoidable; this analysis offers' some insight to the procedural gaps, and where it is highly impacting the organization. Possible solutions are concluded such as improving project handling team's coordination and communication, utilizing a blanket service contract, and modifying the projects gate system procedures to minimize the possibility of having similar struggles in future. Projects in the Oil and Gas sector are always evolving and demand a certain amount of flexibility to sustain the goals of the field. As it will be demonstrated, the uncertainty of project parameters, in adequate project definition, operational constraints and stringent procedures are main factors resulting in the need for Adjustment Orders and accordingly the recommendation will be to address that challenge.

Keywords : adjustment orders, data analysis, oil and gas sector, systems management

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