

Abstract

Title: Project Controls

Sub-Title: Project Controls are the Key to the Successful Execution of Civil Engineering Projects

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Purpose: This dissertation was initiated from the researcher's experience in managing civil projects on behalf of civil engineering contractors. The lack of utilisation of project control procedures was a cause for concern therefore an investigation into whether project controls would positively influence the success of a project was undertaken. It was expected that the conclusions and recommendations would be of assistance to those within the industry who shared similar concerns.

Methodology: This process involved the completion of a literature review in relation to project controls on civil engineering projects. The methodology encompassed a personal semi-structured interview with five individuals operating in different areas of the industry in order to obtain differing viewpoints. The participants were regional managers or managing directors of private companies or public bodies.

Findings: Project controls are part of the industry's framework but are implemented on an ad hoc basis. There is a level of satisfaction with the contracts currently employed. The industry's use of design and build contracts has allowed for the early completion of projects at a high standard. PPP projects are also driven to be completed early so as to generate an income; however the true reality of their capabilities has yet to be realised. There is a clear consensus that the IEI contracts produce a high quality product, value for money and programme control at it is a clear and concise contract that is widely used. Its one contrasting aspect is the effects of unforeseen ground conditions. The high volume of paper work associated with the FIDIC contract is quickly counteracted by its ability to manage and control claims. Its worldwide use conveys the industry's satisfaction with the contract. The New Government Forms of Contract negatively affect control by generating an adversarial atmosphere due to below cost tendering and the lack of pricing risk. Despite the fact that the industry recognises the importance of control procedures the knowledge and experience of the software packages is not available within the industry. Instead the industry relies on contracts and in-house procedures. There is confusion in relation to the software packages available and an overwhelming desire for one all encompassing package to meet the industry's needs. In conjunction with this the research establishes the importance for the client to be the driving force in the implementation of project controls from the onset of a project.

Keywords: civil engineering, project controls, project management, construction,