SOCIO-ORGANO COMPLEXITY AND PROJECT PERFORMANCE

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ABSTRACT

Technical complexity has always been considered a factor which affects project performance. Scheduling and other mechanisms have been proposed which allow for the management of these effects. However, the effect of the complexity of interconnections, and in particular those caused by social interfaces and boundaries between the various teams, have not been investigated. Socio-organo complexity is caused by interconnections which if not managed could lead to a reduction in performance. Understanding the characteristics of complexity of interconnections, how these affect project schedule performance and what deductions can be extracted, will enable the development and implementation of innovative actions and tools that will support the management of the effects of complexity through the respective processes. The authors present results of five case studies, with UK construction organisations, which demonstrate that the effects of socio-organo complexity of interconnections have similarities with the behaviour of underdamped control systems. The results from the study have significant implications for the way socio-organisational issues are managed but will also enable parallels to be drawn between the fields of project management and control systems.

KEYWORDS

Complexity, Interconnections, Project Schedule Performance, Control Systems