

## **Project 2: Towards a social networks model for understanding factors for variances in cost and schedule in project implementation and project completion times**

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### **Project Description**

As globalisation occurs and projects become more complex and larger in scope, project teams work across different geographical locations spanning temporal and spatial barriers. Yet, with advance in communication and information technologies, projects still suffer from major cost and schedule overruns. There are plenty of cases studies on the failures and lessons learnt from projects that have faced disastrous outcomes (Kerzner, 2004). According to several theorists, effective communication is one of the key factors in determining the success or failure of a project (Sanvido et. al., 1992). Unfortunately, as it involves people, communication is a complex and continually changing subject that is difficult to measure. Over the last century, human communication has been studied widely in the fields of business, anthropology, sociology, and psychology, yet few tools have been developed that allow managers to analyse how their teams communicate. The field of project management is gradually recognising the importance of having useful tools to analyse project team communication. Mead (2001) successfully reports on using social networks analysis (SNA) to analyse team communications for a \$40 million (USD) construction project in an American university research facility. Chung and Hossain (2009) report on using SNA as a methodology to describe the professional advice-seeking networks of rural doctors in NSW, Australia for understanding delivery of quality care. The use of a social networks perspective to model the relationship between project communication structure and project completion is therefore quite novel. In this research, the following motivating questions are asked: (i) what forms of network structure, ties and position are conducive to successful project completion in terms of positive cost and schedule variances? (ii) does strength of tie play an important role in shortening project lead times (iii) is there an inherent relationship between the properties of project communication networks and successful project outcomes irrespective of project domain?

### **Expected Project Outcome:**

This research will deploy the use of qualitative in-depth interviews to develop a conceptual model for the study, which is to be validated empirically later. It is anticipated that the findings will be useful to the project management community as a whole, project managers especially, and to scholars in the area of information science, and the domain level experts within which the data is to be collected from (e.g. construction/engineering industry).