The Role of Social Relationships and Social Networks in IT Project Teams



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INTRODUCTION

The establishment and maintenance of social relationships and networks in the IT project environment is a phenomenon all IT professionals are exposed to and in many cases involved in. Furthermore, these relationships are used by IT project team members for personal as well as professional purposes. The question is what (negative or positive) impact such social relationships and networks might have on the success or failure of any given IT project?

The objective of this article is therefore to emphasise the important role social relationships and networks play in the IT project team environment. Furthermore, to illustrate to the management (project managers and project leaders) of software project teams how such relationships can have a positive or negative impact on team members. In this regard a climate or culture should be allowed for these relationships to flourish to the benefit of the IT department.

BACKGROUND

The IT project management literature is extensive with regard to success factors as well as the causes of failure; however, little focus is placed on the role or importance of social relationships and networks within IT projects.

Liebowitz (1999) feels that the greatest threat to the success of any IT project is the failure to communicate. This statement in particular draws the attention to the problem area of the research. Although one wants to see a project environment where a culture of sound communications is promoted, it is difficult for any project manager to "control" any influence this might

have on team members and as such on the progress of a given project. Sauer (1993) believes that a major part of the problem of IT project failure is the lack of recognition that information systems development is largely a social and political process. This view is also shared by Standing (1998). Considerable effort has already been spent on the process of managing IT projects and has produced multiple methodologies and methods for project management and the IT software development life cycle (Standing & Bavington, 1996).

Ashworth and Carley (2006) state for example that "Social network theories suggest that the types and degrees of an individual's relationships in social and communication networks are key impactors of group performance, while resource dependency theory suggests that non-social factors, such as knowledge and skills, figure at least as prominently as social dimensions in determining such performance."

In organisational theory, managers are viewed as contributing over and above the skills they have acquired through experience and education, the value of their social networks. These values or assets refer to the social capital of the manager. Scholars have highlighted the ability of these social networks that can be used to the individual's or organisation's advantage (Gargiulo & Benassi, 2000; Ashworth & Carley, 2006). With this in mind, the question is how social relationships and networks within IT project teams are viewed, instead of focusing only on that of the project managers. The social capital of the individuals participating in the IT project teams is an influencing factor on the social networks that are active within the project teams.

The first consideration is that of determining the strength of these social networks. Network strength can be defined as the frequency of communication, while the degree of the network is defined as the number of

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direct links with other network members (Monge & Contractor, 2003, cited in Hovorka & Larsen, 2006).

Social networks have a key function in the social information processing within an organisation, especially relating to connecting social influence, knowledge and the organisational culture to the actual projects at hand. This influence is depicted in Figure 1.

In the rest of the article a brief theoretical analysis of the field is described as well as a brief description of the empirical research.

A THEORETICAL BACKGROUND ON SOCIAL RELATIONSHIPS AND NETWORKS

Relationships between end users and team members of information technology (IT) projects are described by Leonard (2002) as intriguing and complex. According to Leonard a large number of elements (amongst others support; cooperation; knowledge and commitment) are involved during the establishment and maintenance of sound relationships. Furthermore, he argues that if any of these elements are disturbed, the whole relationship is disturbed. In other words, these elements form an holistic "unit." Each of these elements therefore plays a specific social role in a relationship, which impacts on the soundness of a relationship and as such on the cooperation between team members.

In order to overcome the problem of poor relationships between IT professionals and end users,

for example, it is argued that a "human-behaviour" strategy of some kind should be followed. This strategy should involve amongst other things focusing on those social issues that will enhance trust, commitment, cooperation etc. Reich & Benbasit (1999, referred to by Leonard (2002)) point out that there are two dimensions to strategy creation: the intellectual dimension and the social dimension. With regard to this research, the social dimension was the focus.

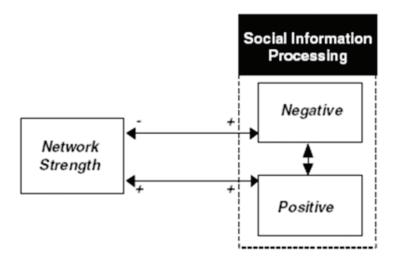
Sound social relationships could be regarded as an important ingredient for any working environment. Not only between employees in general, but also for the purpose of organisational learning and support.

Trust

Although all the elements mentioned by Leonard (2002) are important for the establishment and maintenance of sound relationships, it is noteworthy that the element of trust could be regarded in most cases as the basic ingredient for sound relationships, and therefore more theory is given in this regard.

Trust is an important component in social relationship building, but it remains a complex and ambiguous phenomenon (Kadefors, 2004). Kadefors defines trust as: "Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another." This definition implies that trust is not a behaviour, but rather a psychological state. Furthermore, Kadefors explains that trust is not a prerequisite for coopera-

Figure 1. Interaction of network strength and social information processing (Hovorka & Larsen, 2006)



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