

# Chapter 82

## Social Networks and Employee Knowledge Sharing and Performance: A Chinese Case Study of a State-Owned Enterprise

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### ABSTRACT

*In this chapter, the authors investigate the correlation between characteristics of the four social networks and employee task and contextual performance. The chapter focuses on the degree centrality and betweenness centrality of the four social networks (Job Advisory, Work Discussion, Friendship and Email Networks) of a Chinese state-owned enterprise as well as the individual attributes of knowledge sharing behavior and IT capability. The findings of this research are 1) employee contextual performance is uncorrelated with the network characteristics; 2) it is significantly and positively correlated with knowledge sharing behavior, but significantly and negatively correlated with individual IT capability, and 3) task performance is correlated, both positively and negatively, with various network characteristics, but not with knowledge sharing behavior and individual IT capability. In addition to discussing the cultural dimension of these results, the authors draw theoretical and managerial implications based on our research framework and findings.*

### INTRODUCTION

Social networking has recently made significant strides into the corporate intranets, and employee social networks (ESNs) become increasingly valuable assets to organizations (Skeels & Grudin,

2009). The rise of ESNs has generated important research questions for both academia and practitioners. While researchers agree in general that ESNs have a positive effect on innovation and firm performance (Dyer et al., 1998; Dyer et al., 2000; Mower et al., 1996; Rowley et al., 2000;

DOI: 10.4018/978-1-4666-9562-7.ch082

Vander et al., 2002; Wu et al., 2007), how they affect employee performance remains largely unanswered (Castilla, 2005). Studies on employee performance in the past have largely relied on the economics theory that assumes the rationality of human beings in economic agents' behavior. However, they fail to take into consideration the fact that the behavior can be influenced by their interactions with others in the social networks. Social network analysis (SNA) studies individual choices in the context of the social networks and assumes that personal behavior choices are influenced by networks with which they interact (Jackson, 2008). Based on social network analysis, this research proposes a new approach to studying individual employee performance by examining the influence of social network characteristics on employees. This approach can not only overcome some of the limitations of the conclusions derived from the economic theory, but also provide theoretical support for helping enterprises improve their employee social network structures, promote knowledge sharing, and improve employee performance.

Employee performance can be divided into task performance and contextual performance (Granovetter, 1973; Uzzi, 1997). Task performance can be understood as job performance, that is, employees complete the work specified in their job descriptions. Contextual performance refers to employees' pro-organizational behaviors, which are shown empirically to contribute to firm performance (Bormant et al., 1993). The current mainstream of empirical research on employee performance is done by using the individual attributes of employee data. We adopt a new approach by adding social network characteristics in our social network analysis model on performance. The network characteristics used in this study are the degree centrality and betweenness centrality, extracted from the workplace social networks. Also, we include two individual attributes of the employee knowledge sharing behavior and IT capability.

Although social network analysis has been applied to assess performance (Ahuja et al., 2003; Cross & Cummings, 2004; Soda & Zaheer, 2012; Sparrowe et al., 2001; Waber et al., 2010), integrating social network characteristics and individual attributes in the same model represents a novel approach. This research is a case study of an independent company of a large state-owned enterprise in China. Through the construction of the company's overall social networks and extraction of the individual network characteristics, we build a quantitative model to assess the relationships between social network characteristics, IT capability, knowledge sharing behavior, and performance. Based on the results, we articulate the theoretical and practical implications for advancing performance theory development, improving employee accomplishment, and enhancing a firm's core competitiveness.

## **LITERATURE REVIEW**

### **Employee Performance**

Orga (1986) proposes that performance assessment should pay attention to organizational citizenship, which represents individual behavior that is beneficial to the organization and is discretionary, not directly or explicitly recognized by the formal reward system. This is similar to the popular concept of conscientious dedication in the Chinese society, which puts a great emphasis on individual duties and responsibilities to their working units and the country. Campbell (1990) proposes another performance model to consider that members may exceed the scope of requirements specified by the job description to benefit organizations. Bormant et al. (1993) propose that job performance should be divided into the task performance and contextual performance. The task performance evaluates individual behaviors required by organizations or specific jobs, or, for the completion of the mandate in the job de-

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