Chapter 4
Understanding Knowledge Networks via Social Network Analysis (SNA)

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ABSTRACT
The link between KM and network theory lies in the cultivating of knowledge networks by viewing knowledge as connections and understanding it as the aggregation of connections across different entities albeit it people or organizations (Kadushin, 2004). The study explores primarily on the capabilities and capacity building of government-linked corporations (GLC) in Malaysia in relation to its evolution as a knowledge network. In this chapter, the authors explore the overlap that exists in KM particularly in the entities and sharing of knowledge assets that undergoes a multiplying effect in its value propositions with the forming of interorganizational relationships. The findings of the study indicates that in order to benefit from the knowledge multiplying affects, organizations need to create a “network identity” and develop capabilities as a learning entity that would add value to the network itself. From the context of KM, majority of the GLCs are in the transitory stages in which issues of trust, competencies and communications have been key indicators in forming network relations. As such this chapter would be useful in highlighting the significance of network relations and provides further proliferation in the study of social network theory and significance to KM.

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1 INTRODUCTION

The KM phenomenon as a development of business studies has proven to be more than a management fad and intrigued both theorists and practitioners. This ambiguity has an almost intuitive appeal due to its cross-industrial and cultural nature. Drucker (1998) predicted that the organization of the future would be knowledge-based and would comprise of specialists that form self-managed teams and performs through organized feedback from colleagues, customers and headquarters. There are evidences of viewing organizations and companies alike as a “unit of value creation” (Muller & Valikangas, 2002). A case in point is when BP developed its “epiphanies of scale” in knowledge by encouraging the formation of peer groups across different business units focused on areas of shared interest. The effect was the growth of hundreds of networks and subnetworks (Hansen & Oetinger, 2001).

Hence today a company is valued based on collective knowledge and technical capabilities of the organization including its people, equipment and systems. In other words, it is imperative for companies to be able to be innovative and leverage on intangible knowledge (example ideas, experience) to sustain performance within a business-web (b-webs) environment. Tapscott (2005) defined b-webs as an internetworked set of contributors which are either highly structured or amorphous that collaborate together to create value for customers and wealth for their shareholders. Consequently the notion of b-webs have invented new value propositions, transformed the rules of competition, and mobilizing people and resources to unprecedented levels of performance (Tapscott, Ticoll & Lowy, 2000).

When firms can manage the learning process better which is the more effective way to pass on tacit understandings of how things operate then clearly firms can become more efficient. Muller and Valikangas (2004) purported that a firms role as a unit of value creation can only be heightened and achieved which required firstly organizations form alliances by sharing resources and competencies in mature industries (example: joint ventures) and secondly engage in cross-industrial collaborations in new industries (example: research and development agreements). The challenge therein lies in understanding the impetus in developing interorganizational relations. Therefore this paper aims to offer a discussion on using a ‘knowledge network’ approach in the formation of relationships between firms and organizations alike. For the purpose of this paper the notion of a knowledge network denotes the firm’s value as a network partner to gain further network-specific knowledge that would enhance the efficiency of the network itself (Olkkonen, 2001). This approach would also relate to network positioning (in relation to the level of interdependence) and learning capability (from a KM context). Thus the network theory will be discussed in the paper to describe the nature and development of KM and its significance in interorganizational relationships. The three main propositions of the research are (i) to explore the knowledge network among organizations and understanding the (ii) interorganizational relations (IOR) creates new value networks.

2 INNOVATION AND KM INITIATIVES IN MALAYSIA

According to Muller and Valikangas (2002), the following are factors of innovation in KM initiatives:

- reduced transaction costs with focus on innovation capabilities
- recognition of the value of intangible assets
- software tools for KM and collaborative working
- when firms form organization ties, partnership and alliances are more likely to innovate